TOSHIBA

SERVICE MANUAL

LCD Color Television

37WLT67 Ver. 1

This model is classified as a green product (*1), as indicated by the underlined serial number. This Service Manual describes replacement parts for the green product. When repairing this green product, use the part(s) described in this manual and lead-free solder (*2).
For (*1) and (*2), refer to **GREEN PRODUCT PROCUREMENT** and **LEAD-FREE SOLDER**.

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IMPORTANT NOTICE

WARNING:

You are requested that you shall not modify or alter the information or data provided herein without prior written consent by Toshiba. Toshiba shall not be liable to anybody for any damages, losses, expenses or costs, if any, incurred in connection with or as a result of such modification or alteration.

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Toshiba shall not be liable for any damages, losses, expenses or costs, if any, incurred in connection with or as a result of use of any information or data provided herein.

GREEN PRODUCT PROCUREMENT

The EC is actively promoting the WEEE & RoHS Directives that define standards for recycling and reuse of Waste Electrical and Electronic Equipment and for the Restriction of the use of certain Hazardous Substances. From July 1, 2006, the RoHS Directive will prohibit any marketing of new products containing the restricted substances.

Increasing attention is given to issues related to the global environmental. Toshiba Corporation recognizes environmental protection as a key management tasks, and is doing its utmost to enhance and improve the quality and scope of its environmental activities. In line with this, Toshiba proactively promotes Green Procurement, and seeks to purchase and use products, parts and materials that have low environmental impacts.

Green procurement of parts is not only confined to manufacture. The same green parts used in manufacture must also be used as replacement parts.

LEAD-FREE SOLDER

This product is manufactured using lead-free solder as a part of a movement within the consumer products industry at large to be environmentally responsible. Lead-free solder must be used in the servicing and repair of this product.

WARNING: This product is manufactured using lead free solder.
DO NOT USE LEAD BASED SOLDER TO REPAIR THIS PRODUCT!

The melting temperature of lead-free solder is higher than that of leaded solder by 86ºF to 104ºF (30ºC to 40ºC). Use of a soldering iron designed for lead-based solders to repair product made with lead-free solder may result in damage to the component and or PCB being soldered. Great care should be made to ensure high-quality soldering when servicing this product especially when soldering large components, through-hole pins, and on PCBs as the level of heat required to melt lead-free solder is high.

SAFETY INSTRUCTION

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" INSTRUCTIONS BELOW.

Safety Precaution

WARNING: SERVICING SHOULD NOT BE ATTEMPTED BY ANYONE UNFAMILIAR WITH THE NECESSARY PRECAUTIONS ON THIS RECEIVER. THE FOLLOWING ARE THE NECESSARY PRECAUTIONS TO BE OBSERVED BEFORE SERVICING THIS CHASSIS.

1. An isolation transformer should be connected in the power line between the receiver and the AC line before any service is performed on the receiver.

2. Always disconnect the power plug before any disassembling of the product. It may result in electrical shock.

3. When replacing a chassis in the cabinet, always be certain that all the protective devices are put back in place, such as nonmetallic control knobs, insulating covers, shields, isolation resistor-capacitor network, etc.

4. Always keep tools, components of the product, etc away from the children, These items may cause injury to children.

5. Depending on the model, use an isolation transformer or wear suitable gloves when servicing with the power on, and disconnect the power plug to avoid electrical shock when replacing parts. In some cases, alternating current is also impressed in the chassis, so electrical shock is possible if the chassis is contacted with the power on.

6. Always use the replacement parts specified for the particular model when making repairs. The parts used in products require special safety characteristics such as

inflammability, voltage resistance, etc. therefore, use only replacement parts that have these same characteristics. Use only the specified parts when the ⚠ mark is indicated in the circuit diagram or parts list.

7. Parts mounting and routing dressing of wirings should be the same as that used originally. For safety purposes, insulating materials such as isolation tube or tape are sometimes used and printed circuit boards are sometimes mounted floating. Also make sure that wirings is routed and clamped to avoid parts that generate heat and which use high voltage. Always follow the manufactured wiring routes / dressings.

8. Always ensure that all internal wirings are in accordance before re-assembling the external casing after a repairing completed. Do not allow internal wiring to be pinched by cabinets, panels, etc. Any error in reassembly or wiring can result in electrical leakage, flame, etc., and may be hazardous.

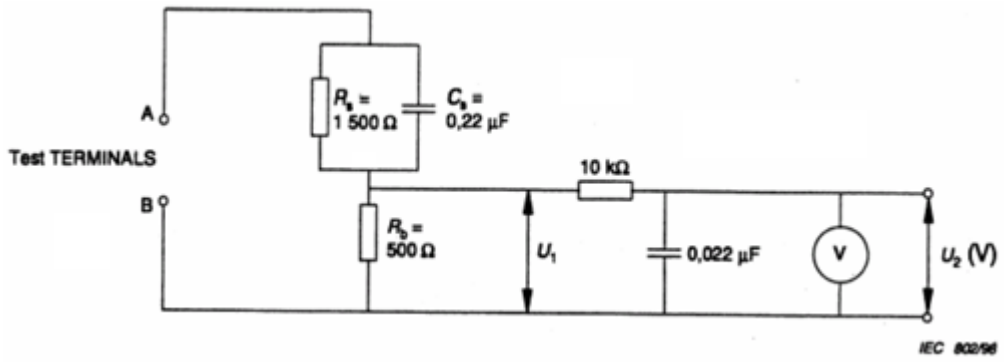
9. NEVER remodel the product in any way. Remodeling can result in improper operation, malfunction, or electrical leakage and flame, which may be hazardous.

10. Touch current check. (After completing the work, measure touch current to prevent an electric shock.)

    - Plug the AC cord directly into the AC outlet. Do NOT use an isolation transformer for this check.
    - Connect a measuring network for touch currents between each exposed metallic part on the set and a good earth ground such as a water pipe.

Annex D
(normative)

Measuring network for TOUCH CURRENTS



Resistance values in orms (Ω).

V: Voltmeter or oscilloscope
(r.m.s. or peak reading)

Input resistance : ≧ 1 MΩ
Input capacitance : ≦ 200 pF
Frequency range : 15 Hz to 1 MHz and d.c. respectively

Note: Appropriate measures should be taken to obtain the correct value in case of non sinusoidal waveforms.

The measuring instrument is calibrated by comparing the frequency factor of U_2 with the solid line in figure F.2 of IEC 60990 at various frequencies. A calibration curve is constructed showing the deviation of U_2 from the ideal curve as a function of frequency.

TOUCH CURRENT = U_2/500 (peak value).

- The potential at any point (TOUCH CURRENT) expressed as voltage U_1 and U_2 does not exceed the following value:

The part or contact of a TERMINAL is not HAZARDOUS LIVE if:

a) The open-circuit voltage should not exceed 35 V (peak) a.c. or 60 V d.c. or, if a) is not met.
b) The measurement of the TOUCH CURRENT shall be carried out in accordance with IEC 60990, with the measuring network described in **Annex D** of this standard.

The TOUCH CURRENT expressed as voltages U_1 and U_2, does not exceed the following values:
- for a.c. : U_1 = 35 V (peak) and U_2 = 0.35 V (peak);
- for d.c. : U_1 = 1.0 V

Note: The limit values of U_2 = 0.35 V (peak) for a.c. and U_1 = 1.0 V for d.c. correspond to the values 0.7 mA (peak) a.c. and 2.0 mA d.c.

Product Safety Notice

Many electrical and mechanical parts in this chassis have special safety-related characteristics. These characteristics are often passed unnoticed by a visual inspection and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this manual and its supplements; electrical components having such features are identified by the international hazard symbols on the schematic diagram and the parts list.
Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts which do not have the same safety characteristics as specified in the parts list may create electrical shock, fire, or other hazards.

SAFETY INSTRUCTION

Handling the LCD Module

Safety Precaution

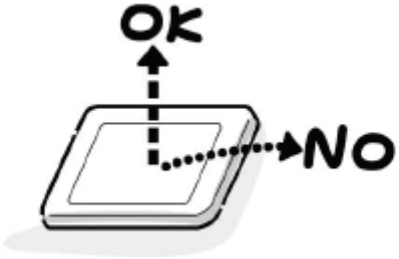
In the event that the screen is damaged or the liquid crystal (fluid) leaks, do not breathe in or drink this fluid.
Also, never touch this fluid. Such actions could cause toxicity or skin irritation. If this fluid should enter the mouth, rinse the mouth thoroughly with water. If the fluid should contact the skin or clothing, wipe off with alcohol, etc., and rinse thoroughly with water. If the fluid should enter the eyes, immediately rinse the eyes thoroughly with running water.

Precautions for Handling the LCD Module

CAUTION: The metal edges of the LCD module are sharp, handle it with care.

The LCD module can easily be damaged during disassembly or reassembly; therefore, always observe the following precautions when handling the module.

1. When attaching the LCD module to the LCD cover, position it appropriately and fasten at the position where the display can be viewed most conveniently.



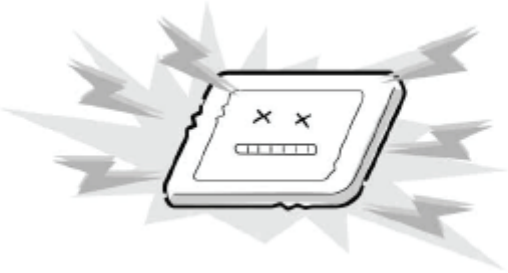
2. Carefully align the holes at all four corners of the LCD module with the corresponding holes in the LCD cover and fasten with screws. Do not strongly push on the module because any impact can adversely affect the performance. Also use caution when handling the polarized screen because it can easily be damaged.

3. If the panel surface becomes soiled, wipe with cotton or a soft cloth. If this does not remove the soiling, breathe on the surface and then wipe again.
   If the panel surface is extremely solied, use a CRT cleaner as a cleaner. Wipe off the panel surface by drop the cleaner on the cloth. Do not drop the cleaner on the panel. Pay attention not to scratch the panel surface.

4. Leaving water or other fluids on the panel screen for an extended period of time can result in discoloration or stripes. Immediately remove any type of fluid from the screen.

5. Glass is used in the panel, so do not drop or strike with hard objects. Such actions can damage the panel.

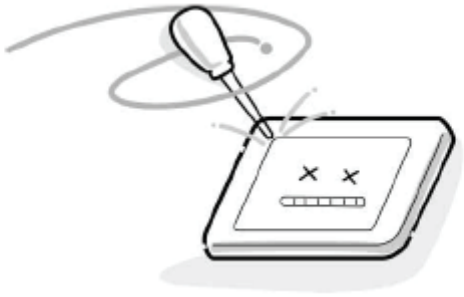
6. CMOS-LSI circuitry is used in the LCD module, so avoid damage due to static electricity. When handling the module, use a wrist ground or anchor ground.



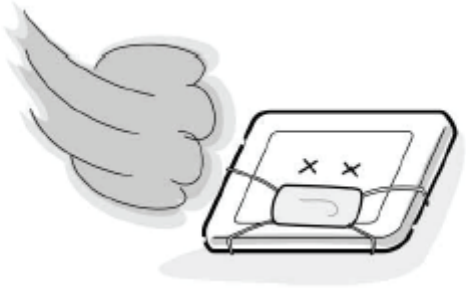
7. Do not expose the LCD module to direct sunlight or strong ultraviolet rays for an extended period of time.

8. Do not store the LCD module below the temperature conditions described in the specifications. Failure to do so could result in freezing of the liquid crystal due to cold air or loss of resilience or other damage.

9. Do not disassemble the LCD module. Such actions could result in improper operation.



10. When transporting the LCD module, do not use packing containing epoxy resin (amine) or silicon resin (alcohol or oxim). The gas generated by these materials can cause loss of polarity.



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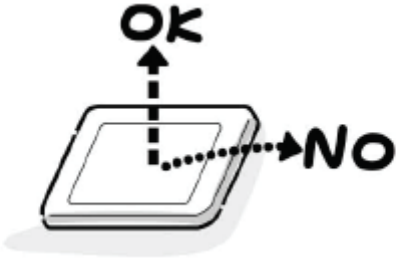

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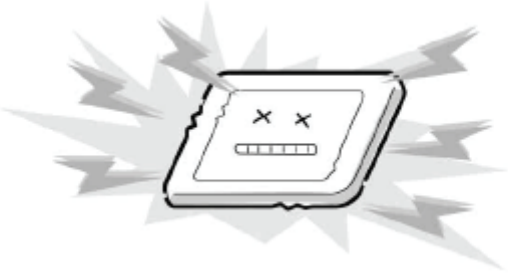

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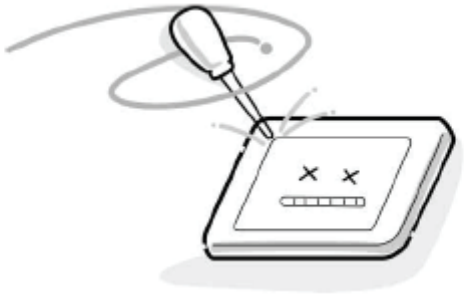

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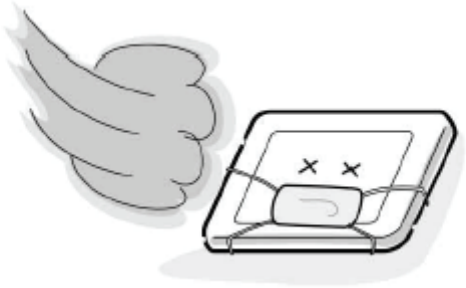
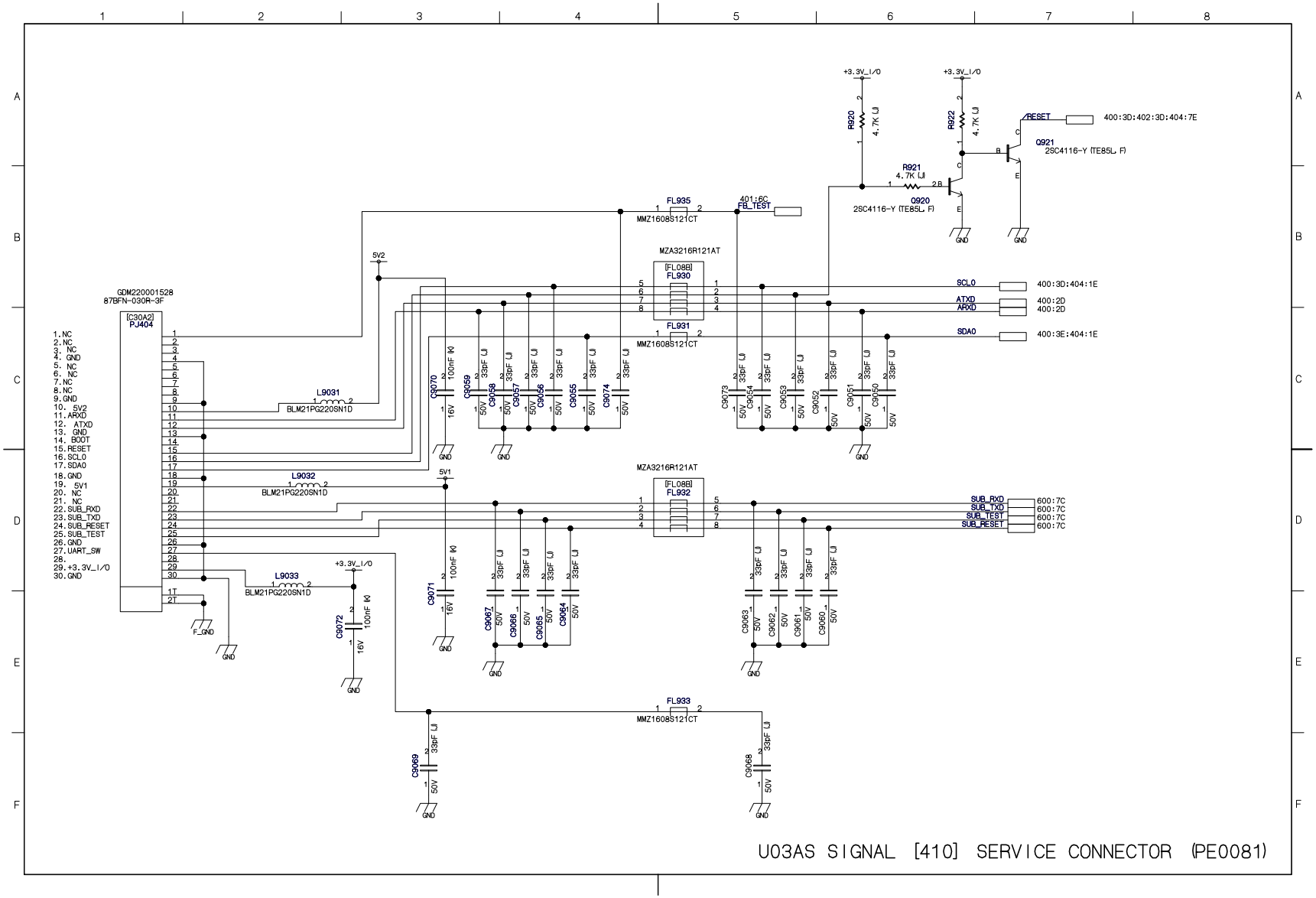
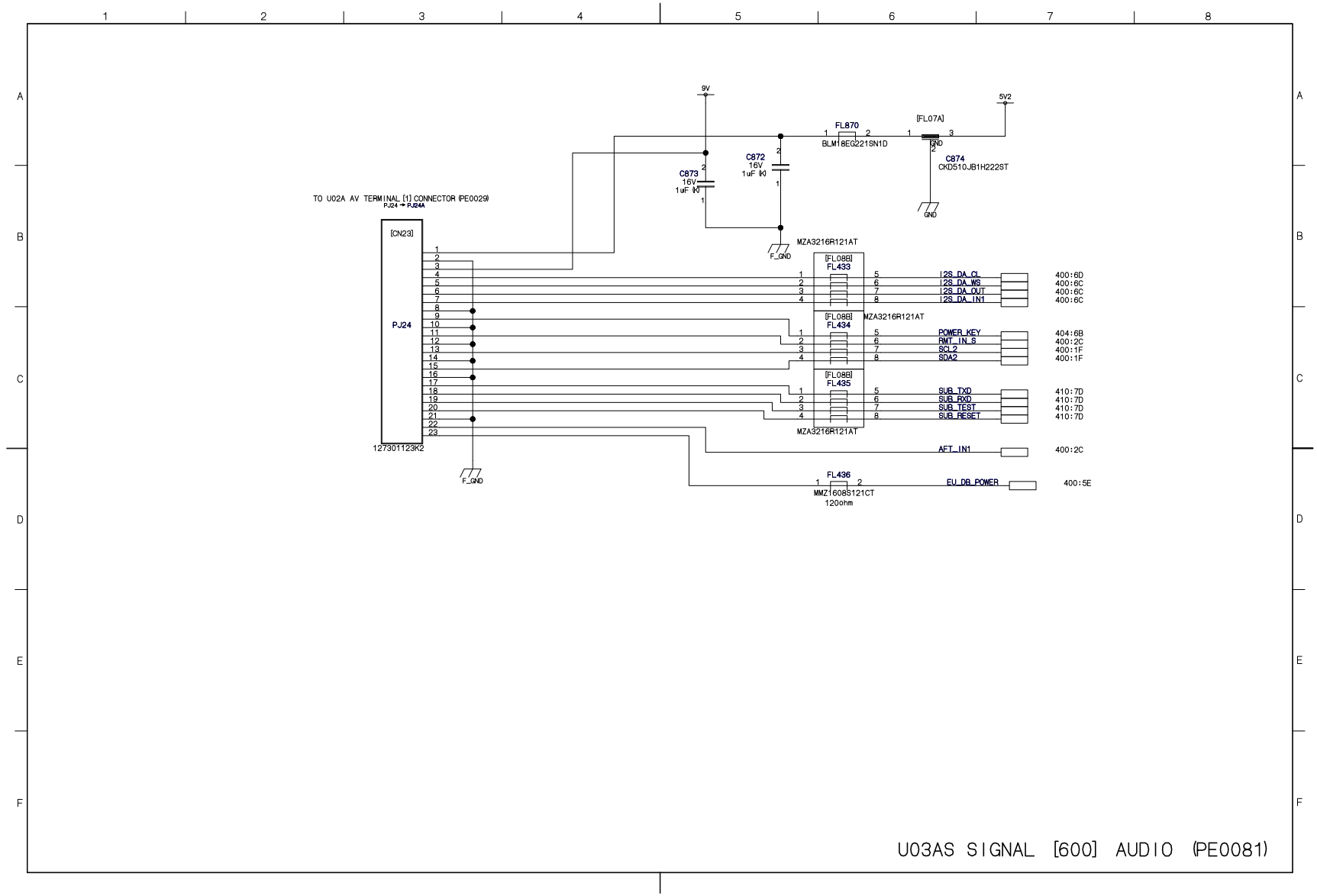
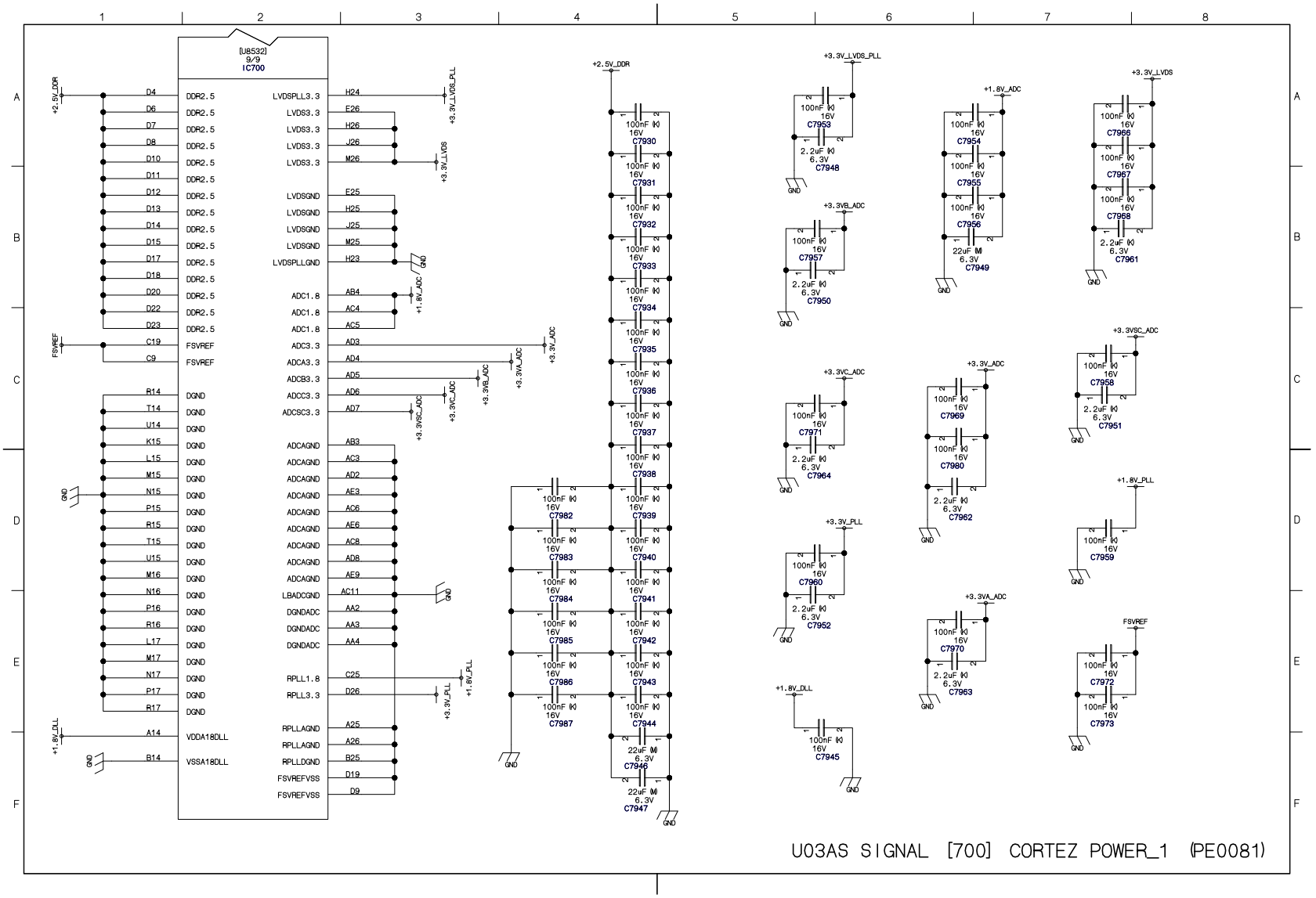




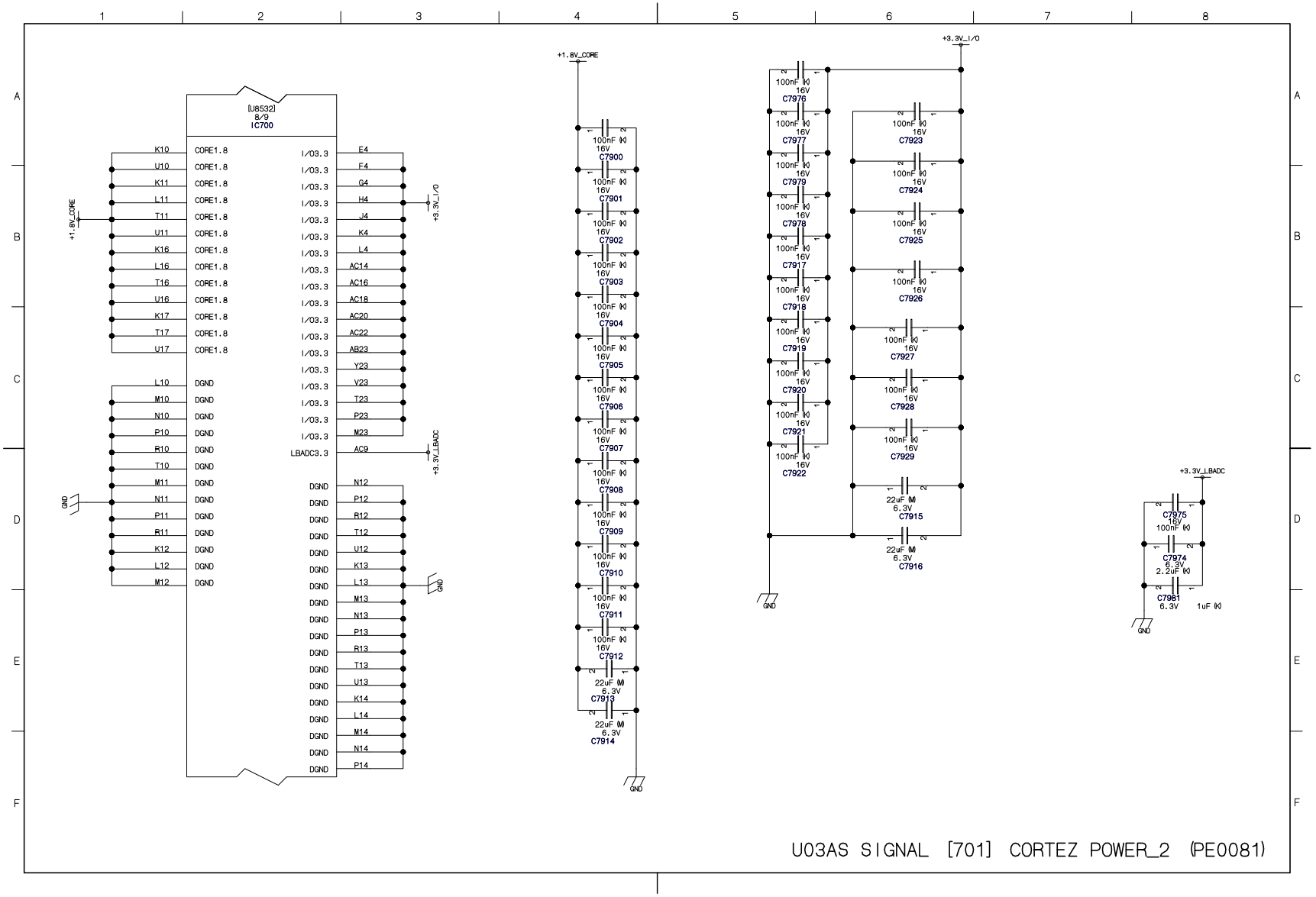
U03AS SIGNAL [410] SERVICE CONNECTOR (PE0081)



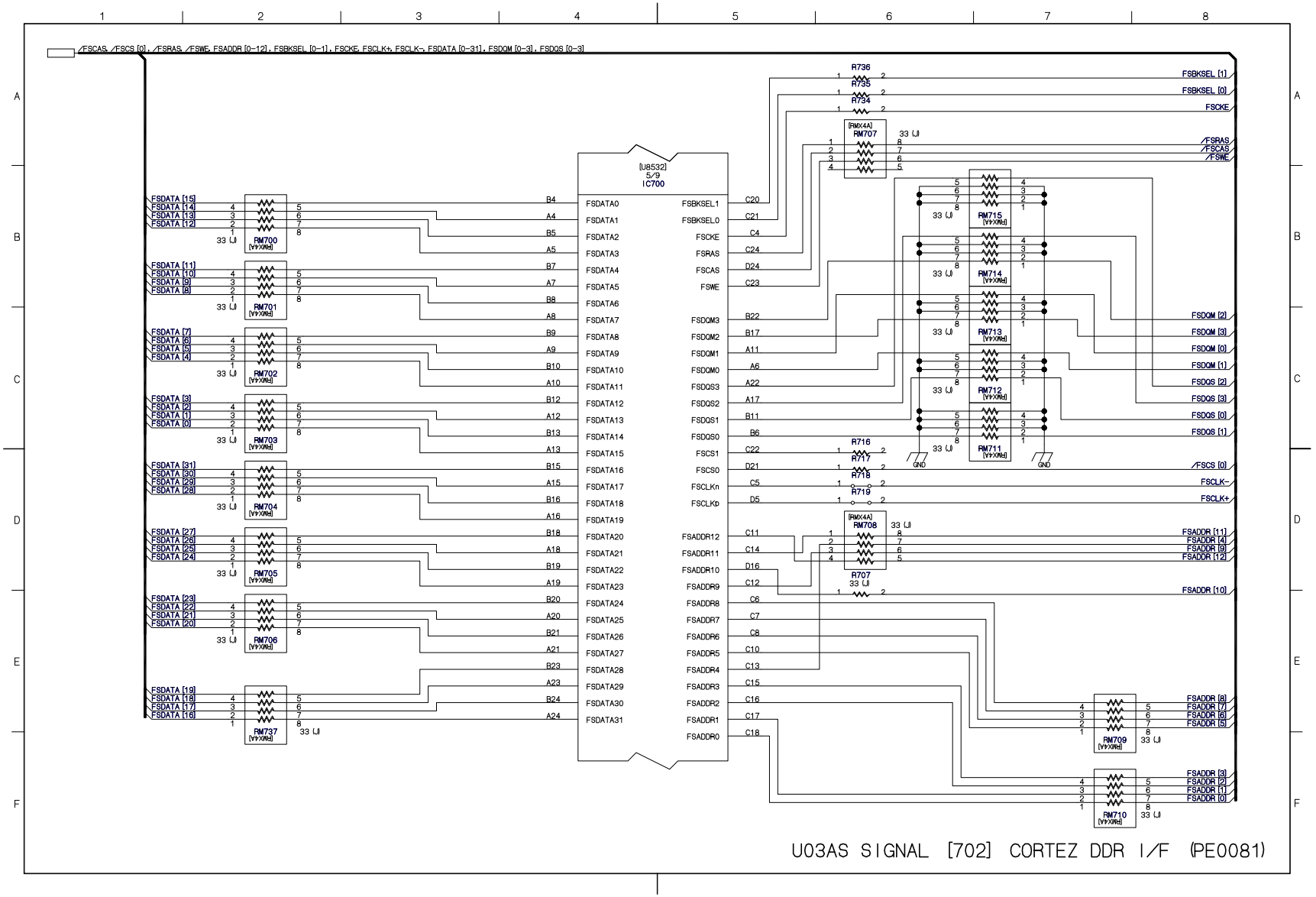
U03AS SIGNAL [600] AUDIO (PE0081)

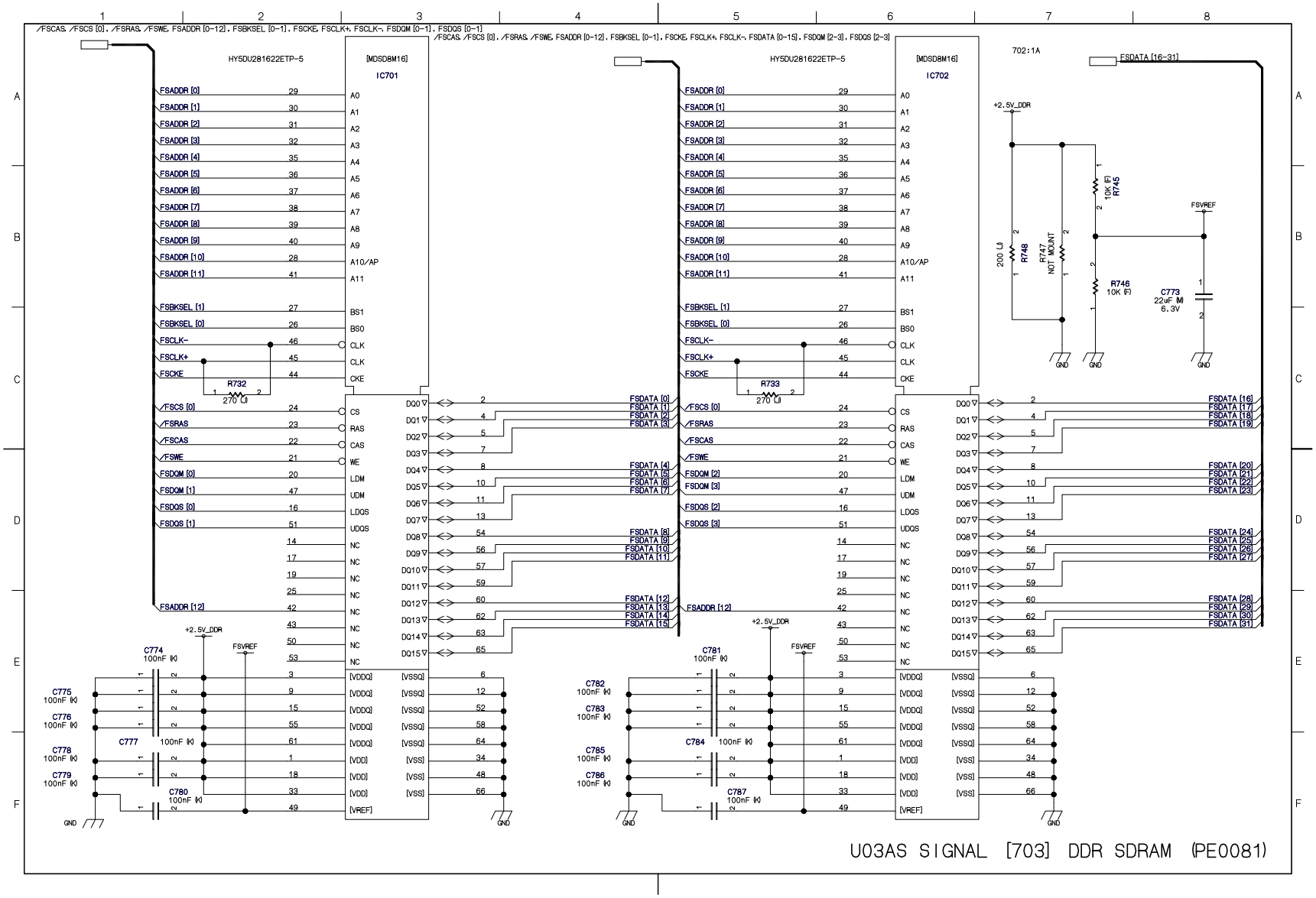


DRAWINGNAME



U03AS SIGNAL [701] CORTEZ POWER_2 (PE0081)


/FSCAS, /FSCS [0], /FSRAS, /FSWE, FSADDR [0-12], FSBKSEL [0-1], FSCKE, FSCLK+, FSCLK-, FSDATA [0-31], FSDQM [0-3], FSDQS [0-3]
[U8532]
5/9
IC700
FSDATA0
FSDATA1
FSDATA2
FSDATA3
FSDATA4
FSDATA5
FSDATA6
FSDATA7
FSDATA8
FSDATA9
FSDATA10
FSDATA11
FSDATA12
FSDATA13
FSDATA14
FSDATA15
FSDATA16
FSDATA17
FSDATA18
FSDATA19
FSDATA20
FSDATA21
FSDATA22
FSDATA23
FSDATA24
FSDATA25
FSDATA26
FSDATA27
FSDATA28
FSDATA29
FSDATA30
FSDATA31
FSBKSEL1
FSBKSEL0
FSCKE
FSRAS
FSCAS
FSWE
FSDQM3
FSDQM2
FSDQM1
FSDQM0
FSDQS3
FSDQS2
FSDQS1
FSDQS0
FSCS1
FSCS0
FSCLKn
FSCLKp
FSADDR12
FSADDR11
FSADDR10
FSADDR9
FSADDR8
FSADDR7
FSADDR6
FSADDR5
FSADDR4
FSADDR3
FSADDR2
FSADDR1
FSADDR0
RM700
RM701
RM702
RM703
RM704
RM705
RM706
RM737
RM707
RM708
RM709
RM710
RM711
RM712
RM713
RM714
RM715
R735
R734
R736
R716
R717
R718
R719
R707
33 Ω
GND
FSBKSEL [1]
FSBKSEL [0]
FSCKE
/FSRAS
/FSCAS
/FSWE
FSDQM [2]
FSDQM [3]
FSDQM [0]
FSDQM [1]
FSDQS [2]
FSDQS [3]
FSDQS [0]
FSDQS [1]
/FSCS [0]
FSCLK-
FSCLK+
FSADDR [11]
FSADDR [4]
FSADDR [9]
FSADDR [12]
FSADDR [10]
FSADDR [8]
FSADDR [7]
FSADDR [6]
FSADDR [5]
FSADDR [3]
FSADDR [2]
FSADDR [1]
FSADDR [0]
U03AS SIGNAL [702] CORTEZ DDR I/F (PE0081)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/FSCAS, /FSCS [0], /FSRAS, /FSWE, FSADDR [0-12], FSBKSEL [0-1], FSCKE, FSCLK+, FSCLK-, FSDATA [0-15], FSDQM [2-3], FSDQS [2-3]
HY5DU281622ETP-5
[MDSD8M16]
IC701
IC702
702:1A
FSDATA [16-31]
+2.5V_DDR
FSVREF
R732
270 Ω
R733
270 Ω
R748
200 Ω
R747
NOT MOUNT
R745
10K (F)
R746
10K (F)
C773
22uF (M)
6.3V
C774
100nF (K)
C775
100nF (K)
C776
100nF (K)
C777
100nF (K)
C778
100nF (K)
C779
100nF (K)
C780
100nF (K)
C781
100nF (K)
C782
100nF (K)
C783
100nF (K)
C784
100nF (K)
C785
100nF (K)
C786
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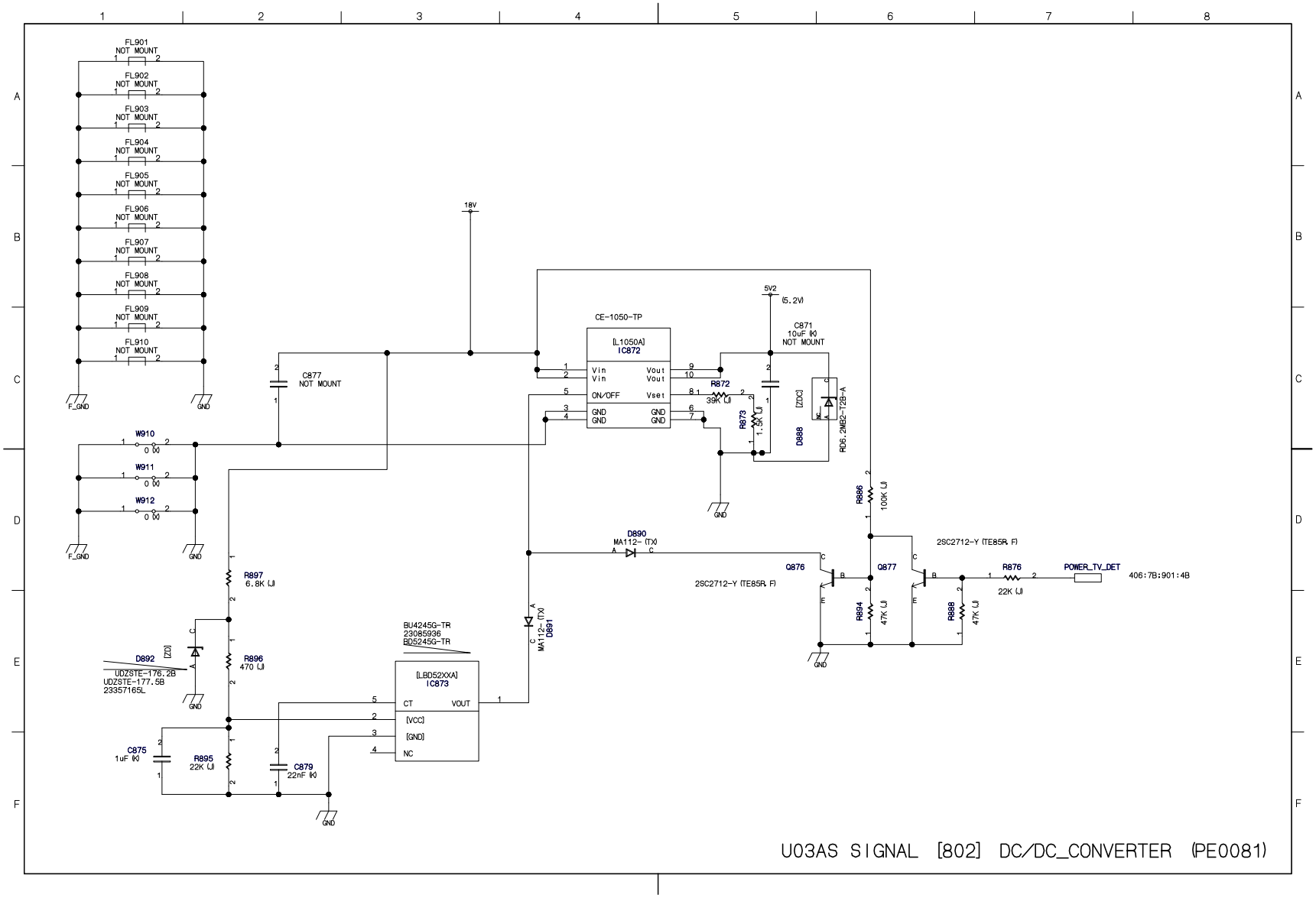
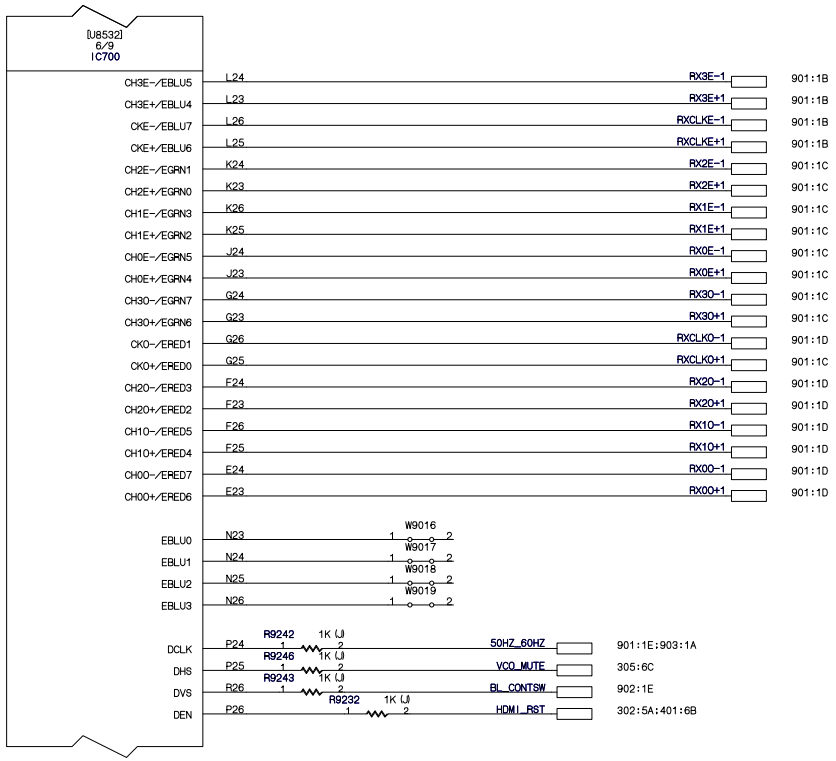
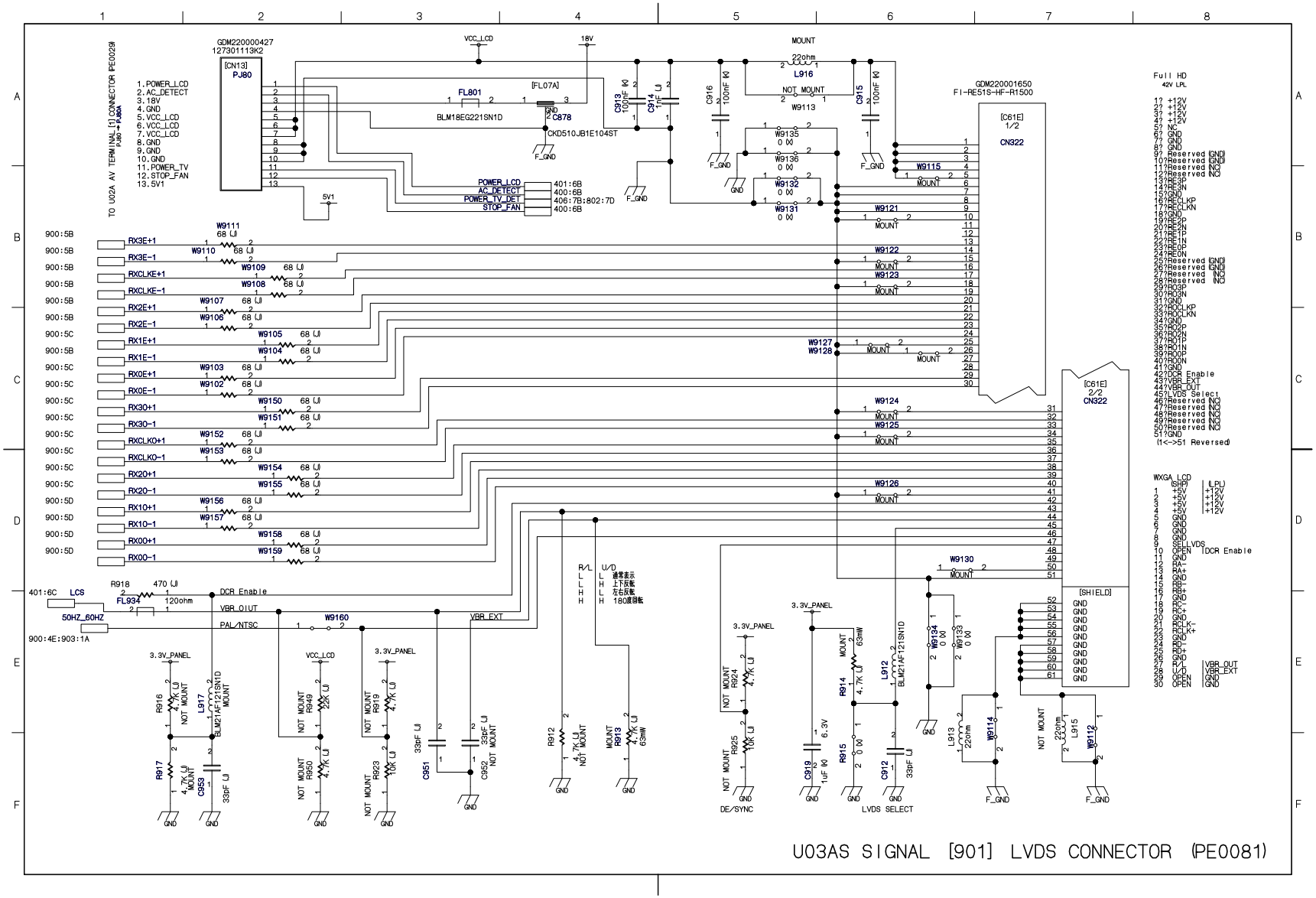
C787
100nF (K)
GND
U03AS SIGNAL [703] DDR SDRAM (PE0081)



U03AS SIGNAL [802] DC/DC_CONVERTER (PE0081)



U03AS SIGNAL [900] CORTEZ LVDS_OUT (PE0081)


U03AS SIGNAL [901] LVDS CONNECTOR (PE0081)
TO U02A AV TERMINAL [1] CONNECTOR (PE0029)
1.POWER_LCD
2.AC_DETECT
3.18V
4.GND
5.VCC_LCD
6.VCC_LCD
7.VCC_LCD
8.GND
9.GND
10.GND
11.POWER_TV
12.STOP_FAN
13.5V1
[CN13]
PJ80
GDM220000427
1273011113K2
FL801
BLM18EG221SN1D
[FL07A]
C878
CKD510JB1E104ST
C913 100nF (K)
C914 1uF (K)
C916 100nF (K)
C915 100nF (K)
L916
22ohm
MOUNT
NOT MOUNT
W9113
W9135 0 (X)
W9136 0 (X)
W9132 0 (X)
W9131 0 (X)
POWER_LCD
AC_DETECT
POWER_TV_DET
STOP_FAN
401:6B
400:6B
406:7B:802:7D
400:6B
5V1
GDM220001650
FI-RE51S-HF-R1500
[C61E]
1/2
CN322
[C61E]
2/2
CN322
[SHIELD]
Full HD
42V LPL
WXGA LCD
(SHP)
(LPL)
W9111 68 (J)
W9110 68 (J)
W9109 68 (J)
W9108 68 (J)
W9107 68 (J)
W9106 68 (J)
W9105 68 (J)
W9104 68 (J)
W9103 68 (J)
W9102 68 (J)
W9150 68 (J)
W9151 68 (J)
W9152 68 (J)
W9153 68 (J)
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W9156 68 (J)
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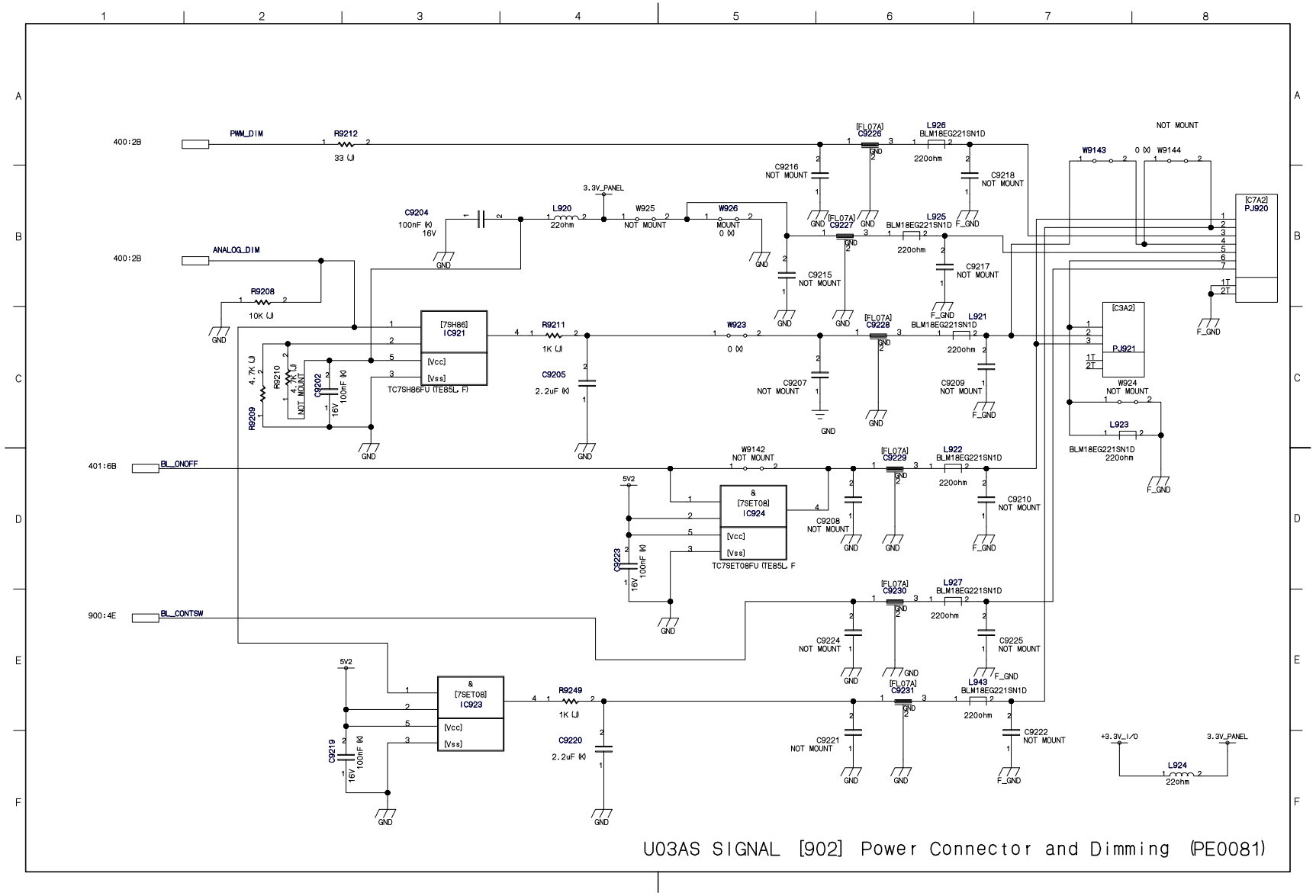
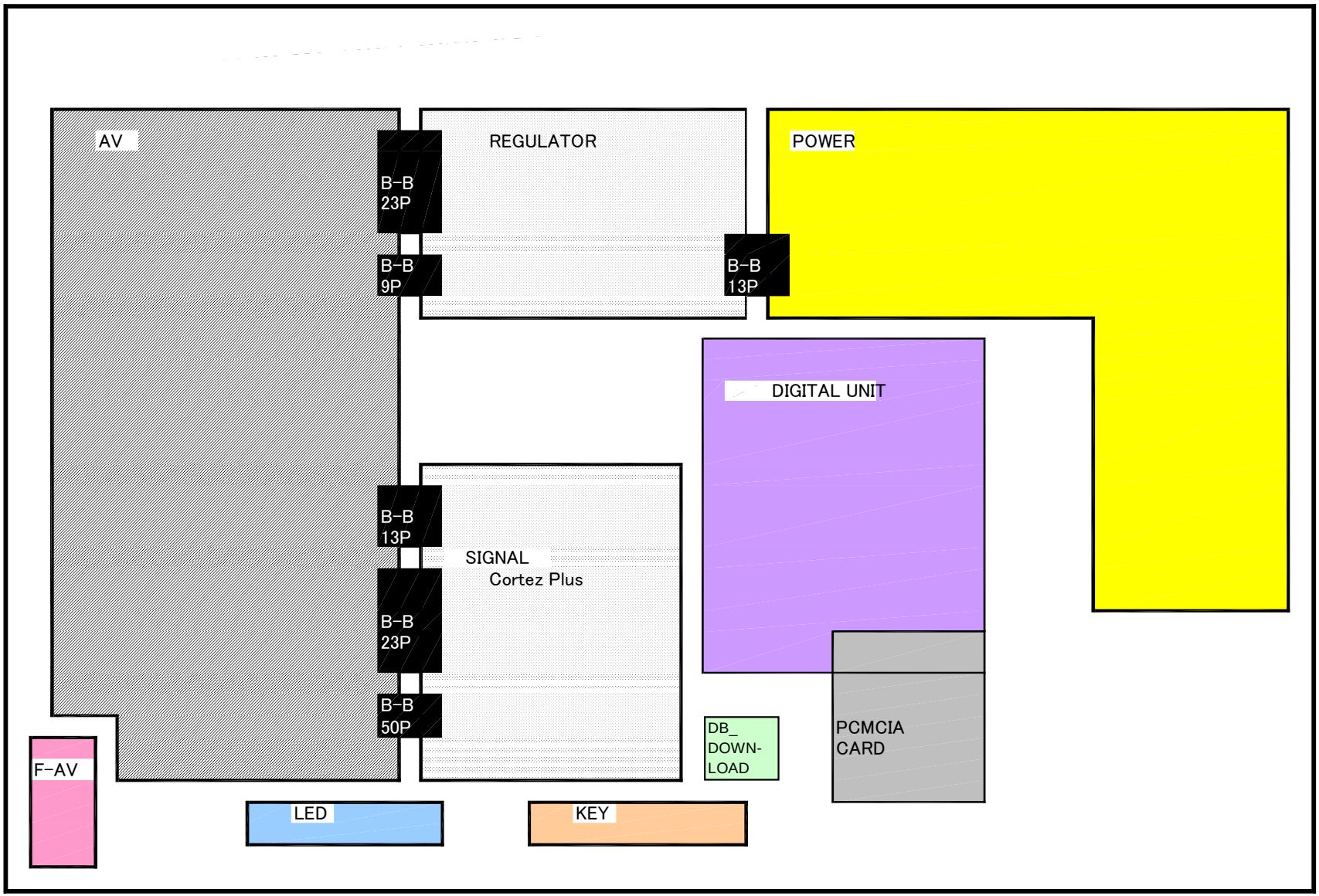
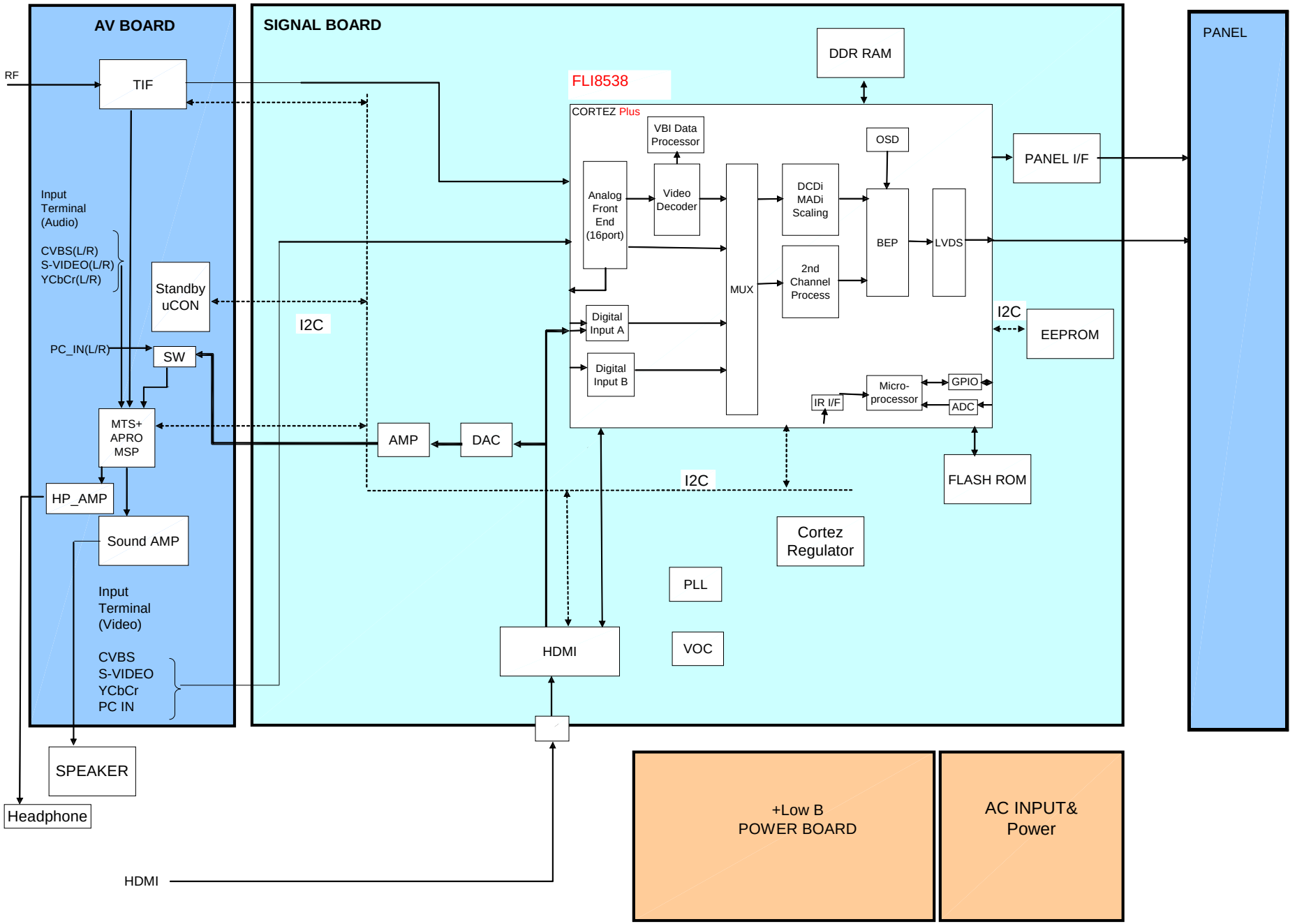
W9158 68 (J)
W9159 68 (J)
W9122
W9123
W9121
W9115
W9127
W9128
W9124
W9125
W9126
W9130
RX3E+1
RX3E-1
RXCLKE+1
RXCLKE-1
RX2E+1
RX2E-1
RX1E+1
RX1E-1
RX0E+1
RX0E-1
RX30+1
RX30-1
RXCLKO+1
RXCLKO-1
RX20+1
RX20-1
RX10+1
RX10-1
RX00+1
RX00-1
R918 470 (J)
FL934 120ohm
401:6C LCS
50HZ_60HZ
900:4E:903:1A
DCR Enable
VBR_OUT
PAL/NTSC
W9160
VBR_EXT
R/L
U/D
通常表示
上下反転
左右反転
180度回転
3.3V_PANEL
VCC_LCD
R916 4.7K (J)
R917 4.7K (J)
L917 BLM21AF121SN1D
C953 33pF (J)
R949 22K (J)
R950 4.7K (J)
R919 4.7K (J)
R923 10K (J)
C951 33pF (J)
C952 33pF (J)
R912 4.7K (J)
R913 4.7K (J)
R924 4.7K (J)
R925 10K (J)
DE/SYNC
R914 4.7K (J)
L912 BLM21AF121SN1D
C919 1uF (K)
R915 0 (X)
C912 33pF (J)
LVDS SELECT
W9134 0 (X)
W9133 0 (X)
L913 22ohm
W9114
L915 22ohm
W9112
VBR_OUT
VBR_EXT
DCR Enable



U03AS SIGNAL [902] Power Connector and Dimming (PE0081)


AV
B-B
23P
B-B
9P
REGULATOR
B-B
13P
POWER
DIGITAL UNIT
B-B
13P
SIGNAL
Cortez Plus
B-B
23P
B-B
50P
PCMCIA
CARD
DB_
DOWN-
LOAD
F-AV
LED
KEY


AV BOARD
SIGNAL BOARD
PANEL
RF
TIF
FLI8538
DDR RAM
CORTEZ Plus
VBI Data Processor
OSD
PANEL I/F
Analog Front End (16port)
Video Decoder
DCDi MADi Scaling
BEP
LVDS
MUX
2nd Channel Process
Input Terminal (Audio)
CVBS(L/R)
S-VIDEO(L/R)
YCbCr(L/R)
Standby uCON
I2C
Digital Input A
Digital Input B
I2C
EEPROM
PC_IN(L/R)
SW
IR I/F
Micro-processor
GPIO
ADC
MTS+ APRO MSP
AMP
DAC
FLASH ROM
HP_AMP
I2C
Sound AMP
Cortez Regulator
PLL
Input Terminal (Video)
HDMI
VOC
CVBS
S-VIDEO
YCbCr
PC IN
SPEAKER
Headphone
HDMI
+Low B POWER BOARD
AC INPUT& Power

SCHEMATIC DIAGRAM

Precaution

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION" FOR DIRECT VIEW CTV ONLY, "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" OF THIS MANUAL.

CAUTION: The international hazard symbols "⚠" in the schematic diagram and the parts list designate components which have special characteristics important for safety and
should be replaced only with types identical to those in the original circuit or specified in the parts list.

The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the SAFETY PRECAUTION and PRODUCT SAFETY NOTICE.

Do not degrade the safety of the receiver through improper servicing.

Note:

1. RESISTOR
   Resistance is shown in ohm [K=1,000, M=1,000,000]. All resistors are 1/6 W and 5 % tolerance carbon resistor, unless otherwise noted as the following marks.

   1/2R : Metal or Metal oxide of 1/2 watt
   1/2S : Carbon composition of 1/2 watt
   1RF : Fuse resistor of 1 watt
   10 W : Cement of 10 watt
   K : ±10 %
   G : ±2 %
   F : ±1 %

2. CAPACITOR
   Unless otherwise noted in schematic, all capacitor values less than 1 are expressed in µF, and the values more than 1 in pF.

All capacitors are ceramic 50 V, unless otherwise noted as the following marks.

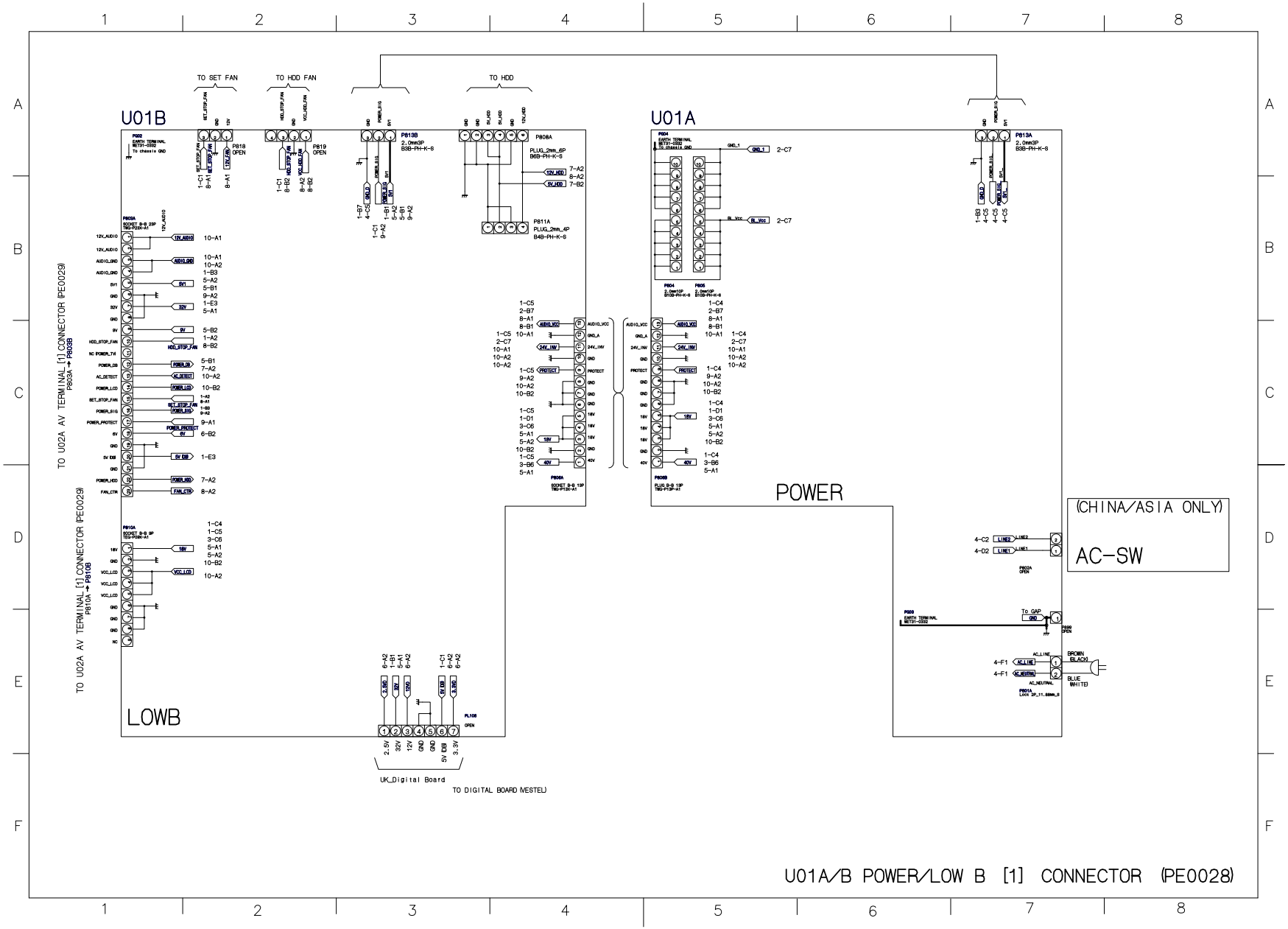
= Electrolytic capacitor
= Mylar capacitor

3. The parts indicated with "⚠" have special characteristics, and should be replaced with identical parts only.

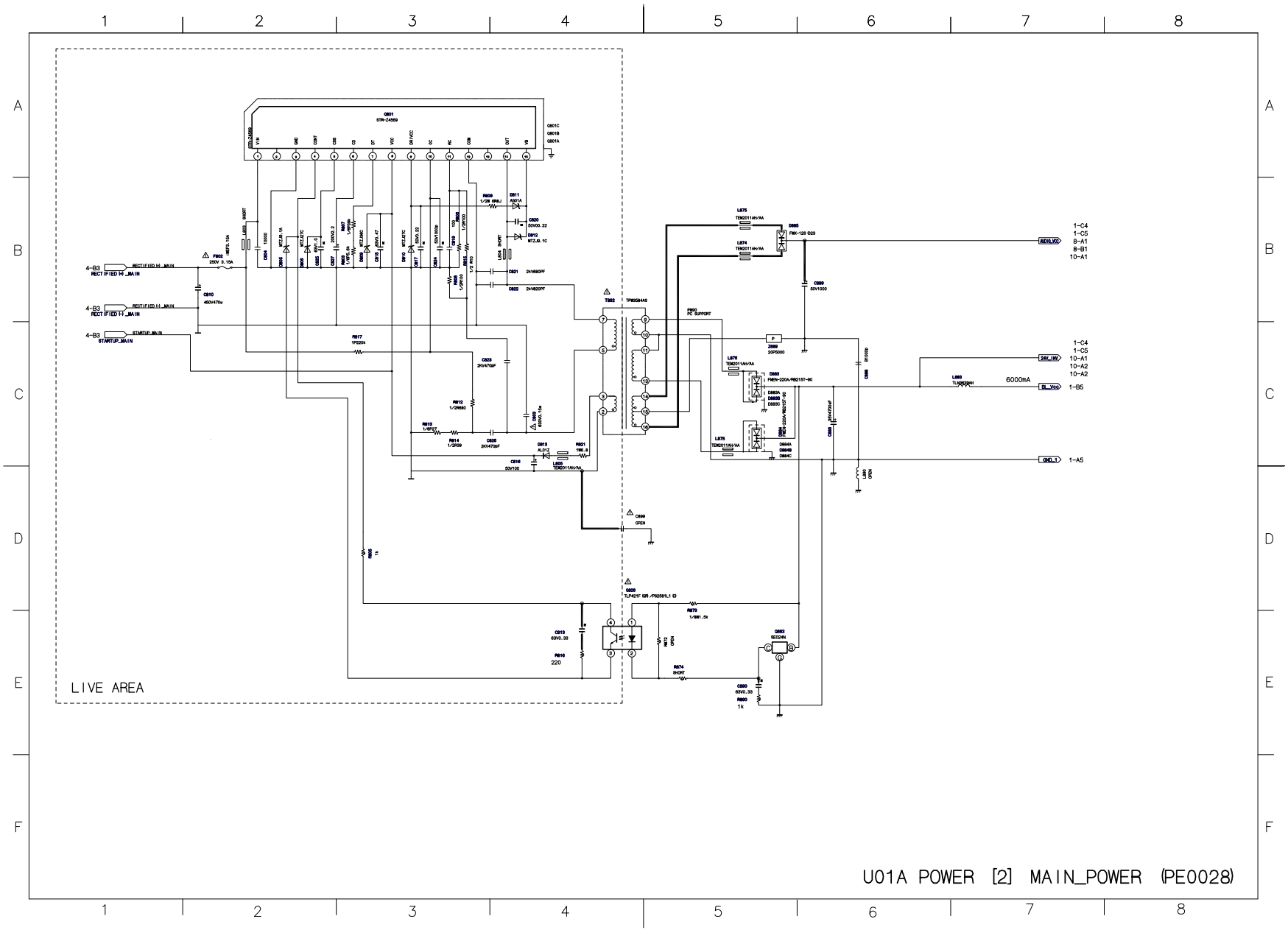
4. Voltages read with DIGITAL MULTI-METER from point indicated to chassis ground, using a color bar signal with all controls at normal, line voltage at nominal AC volts.

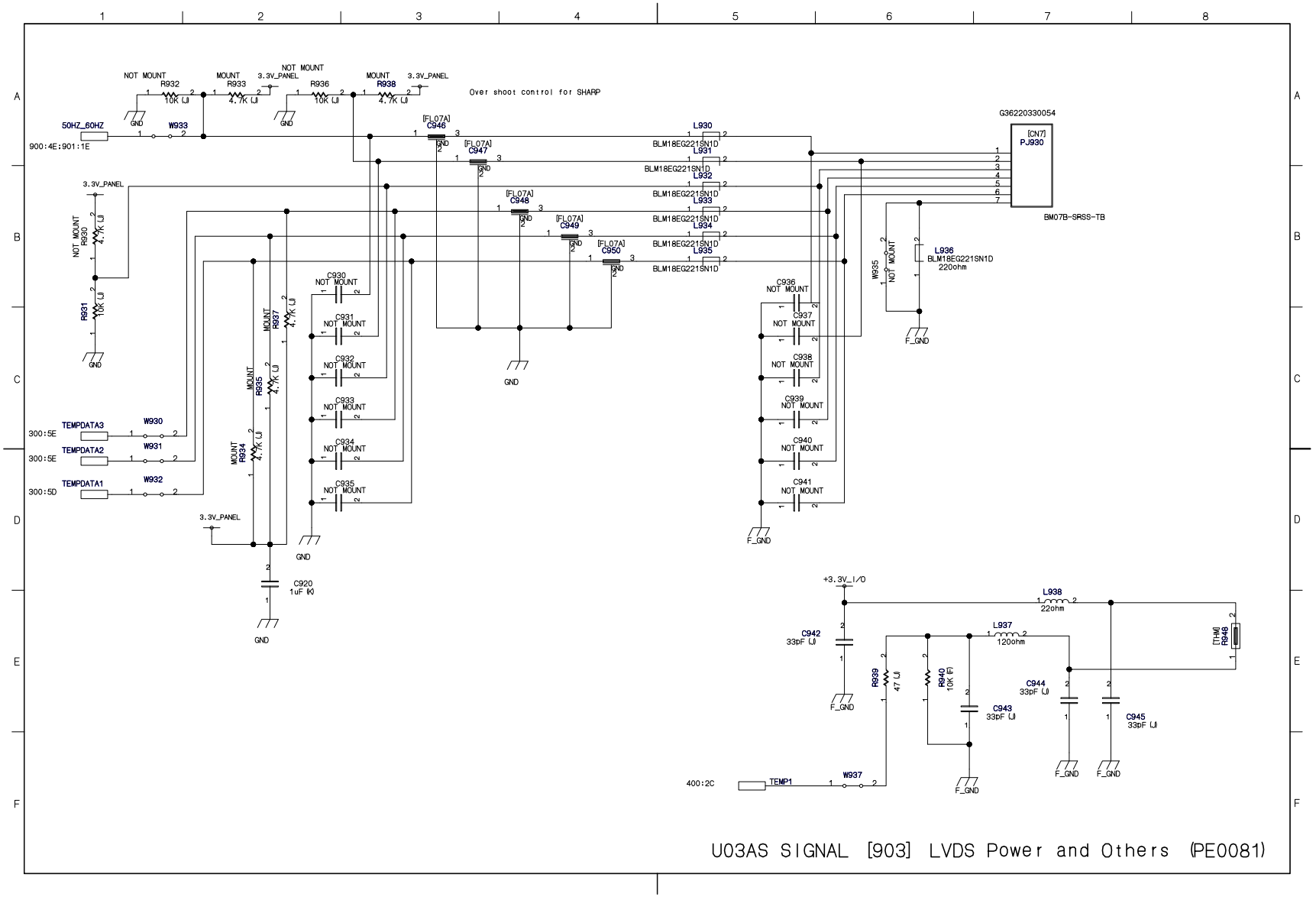
5. Waveforms are taken receiving color bar signal with enough sensitivity.

6. Voltage reading shown are nominal values and may vary ±20 % except H.V.

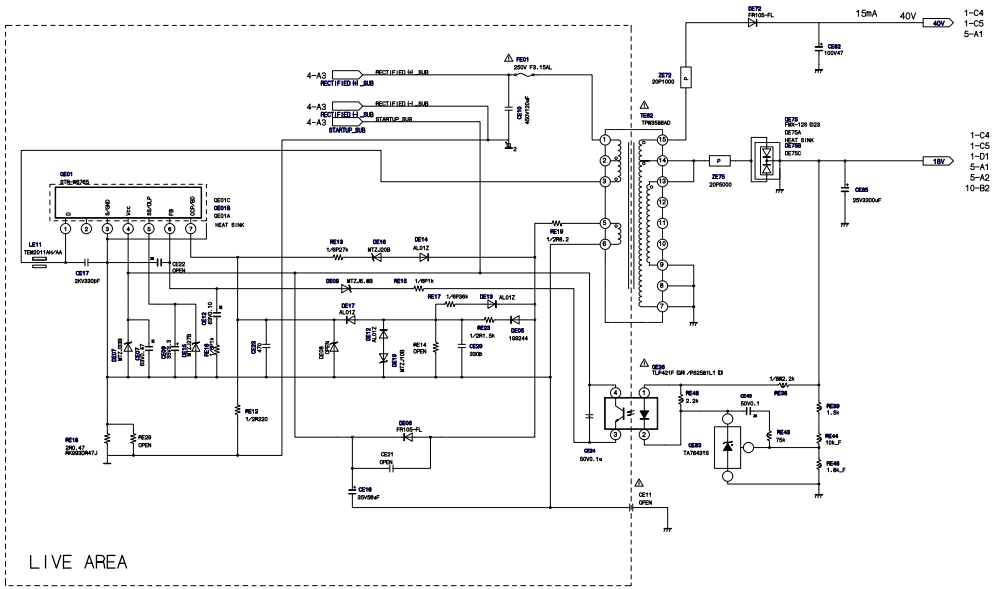


U01A/B POWER/LOW B [1] CONNECTOR (PE0028)

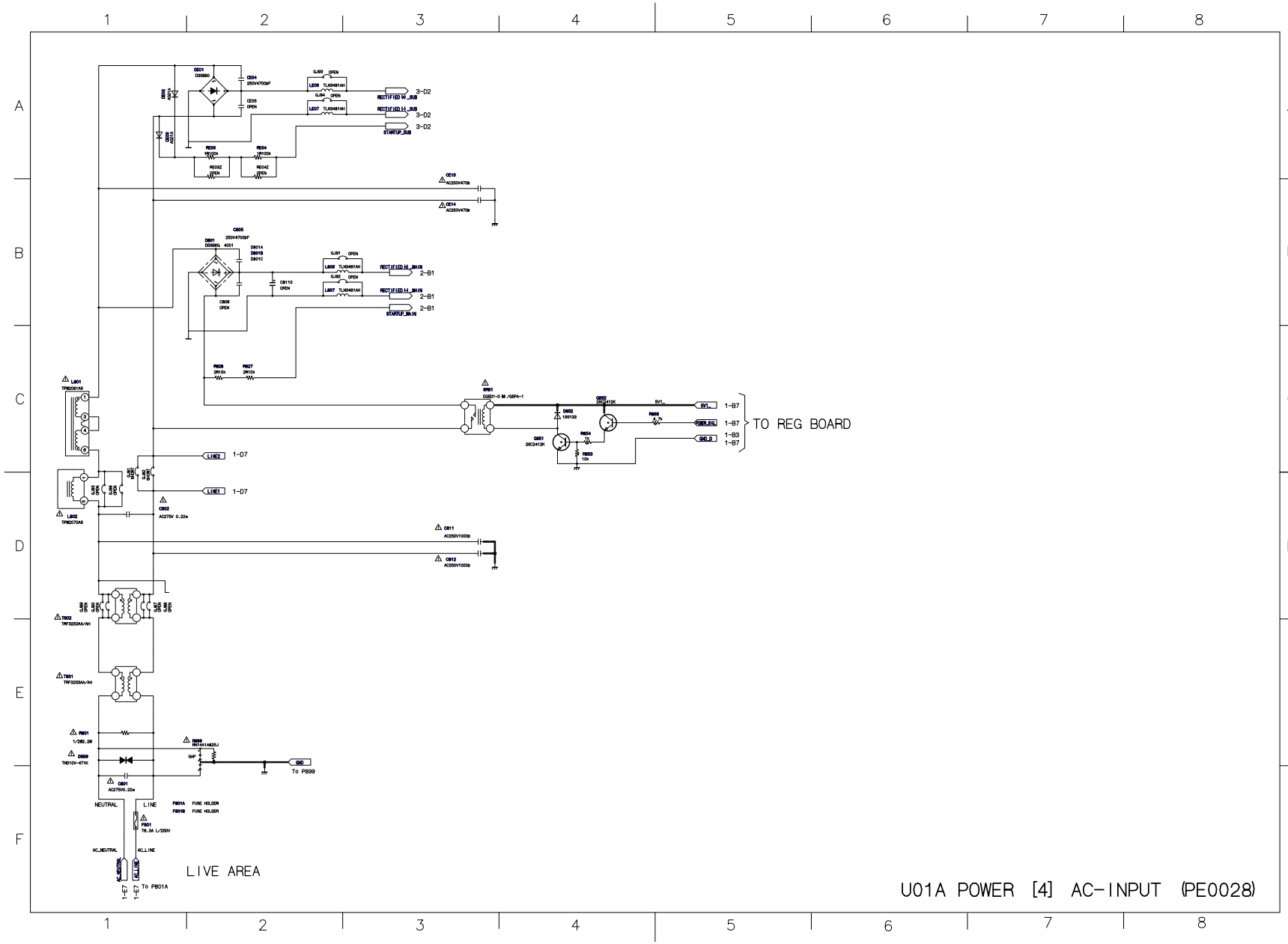

LIVE AREA
4-B3 RECTIFIED H_MAIN
4-B3 RECTIFIED H_MAIN
4-B3 STARTUP_MAIN
6000mA
24V_HW
5L_Vcc
GND_1
ADJ3_VC2
U01A POWER [2] MAIN_POWER (PE0028)

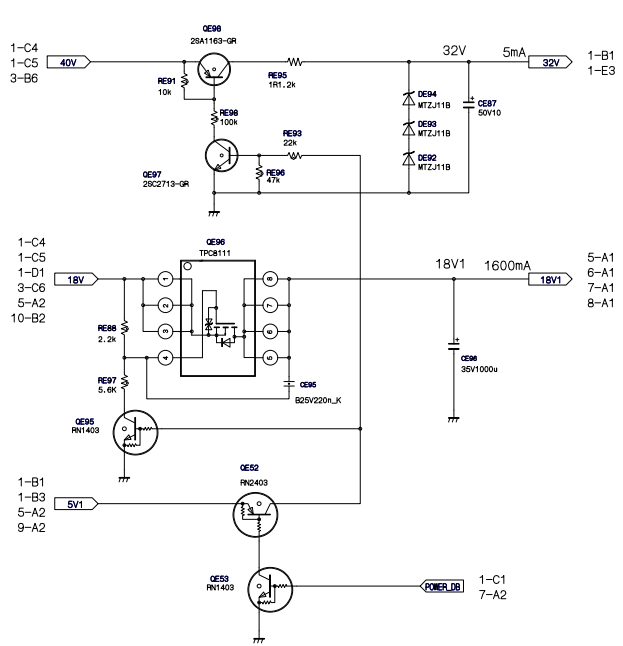


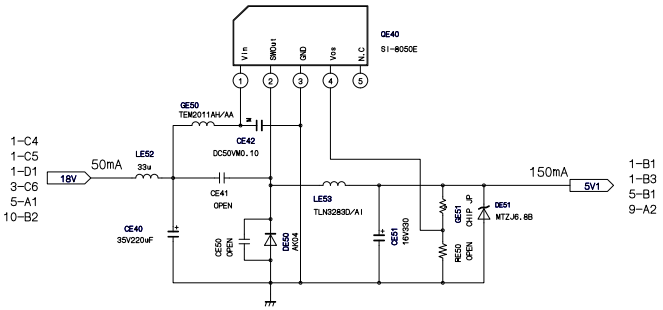
U03AS SIGNAL [903] LVDS Power and Others (PE0081)

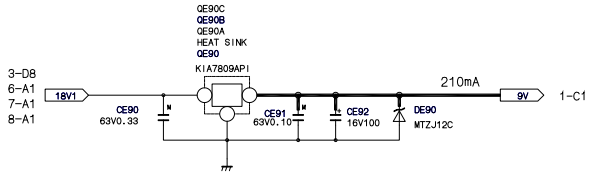


U01A POWER [3] SUB_POWER (PE0028)

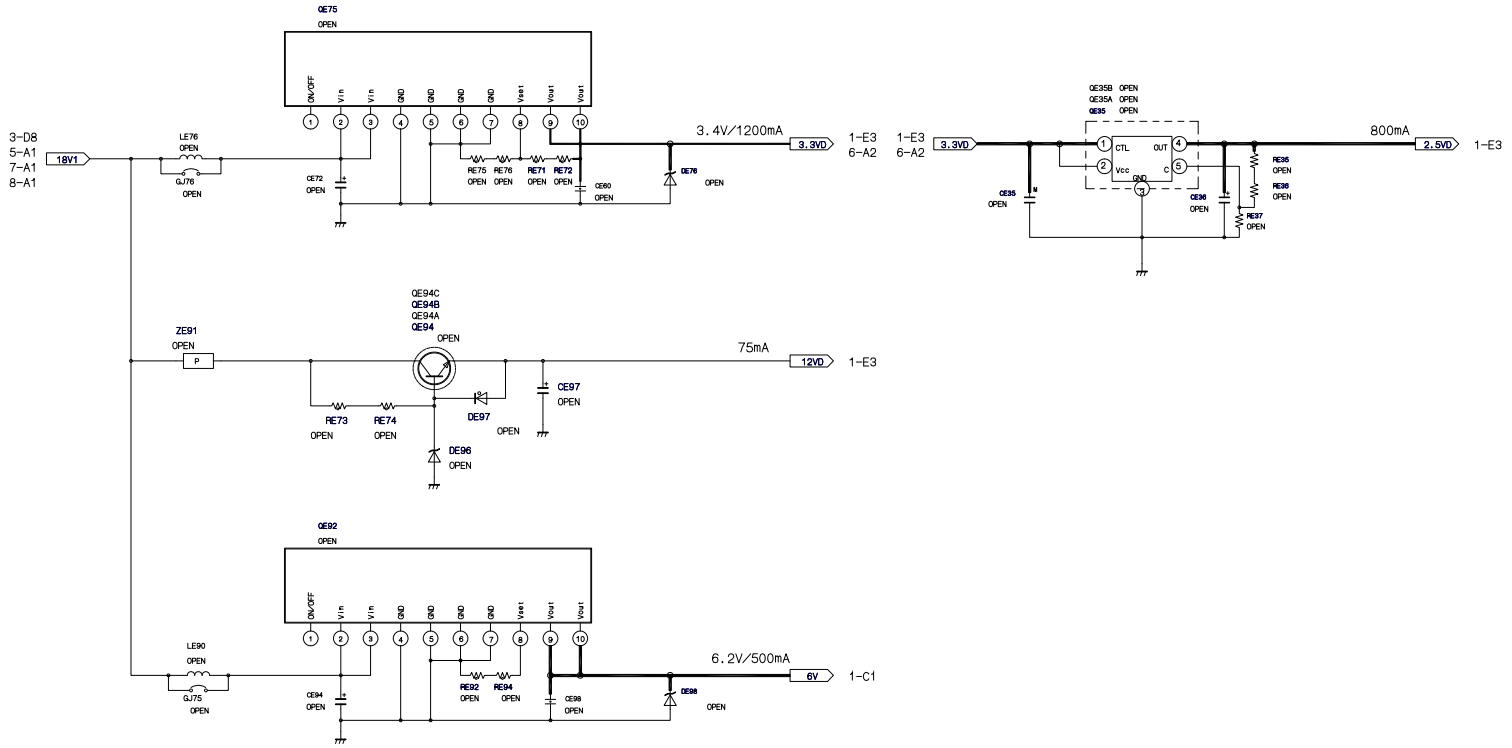

TO REG BOARD
LIVE AREA
NEUTRAL
LINE
To P801A
To P899
U01A POWER [4] AC-INPUT (PE0028)



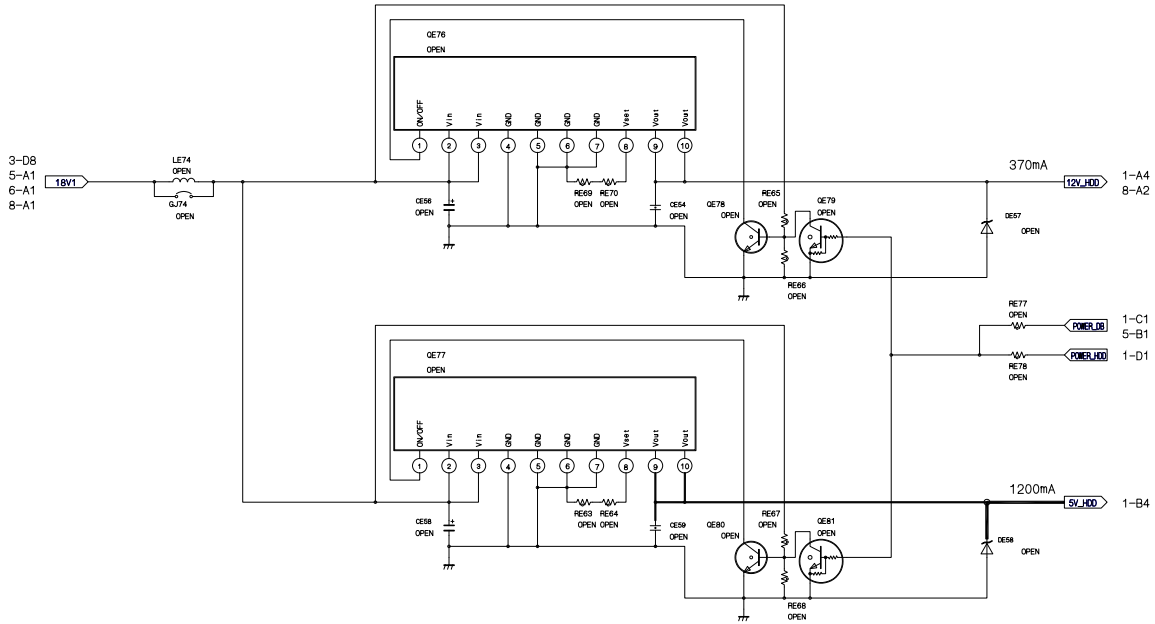




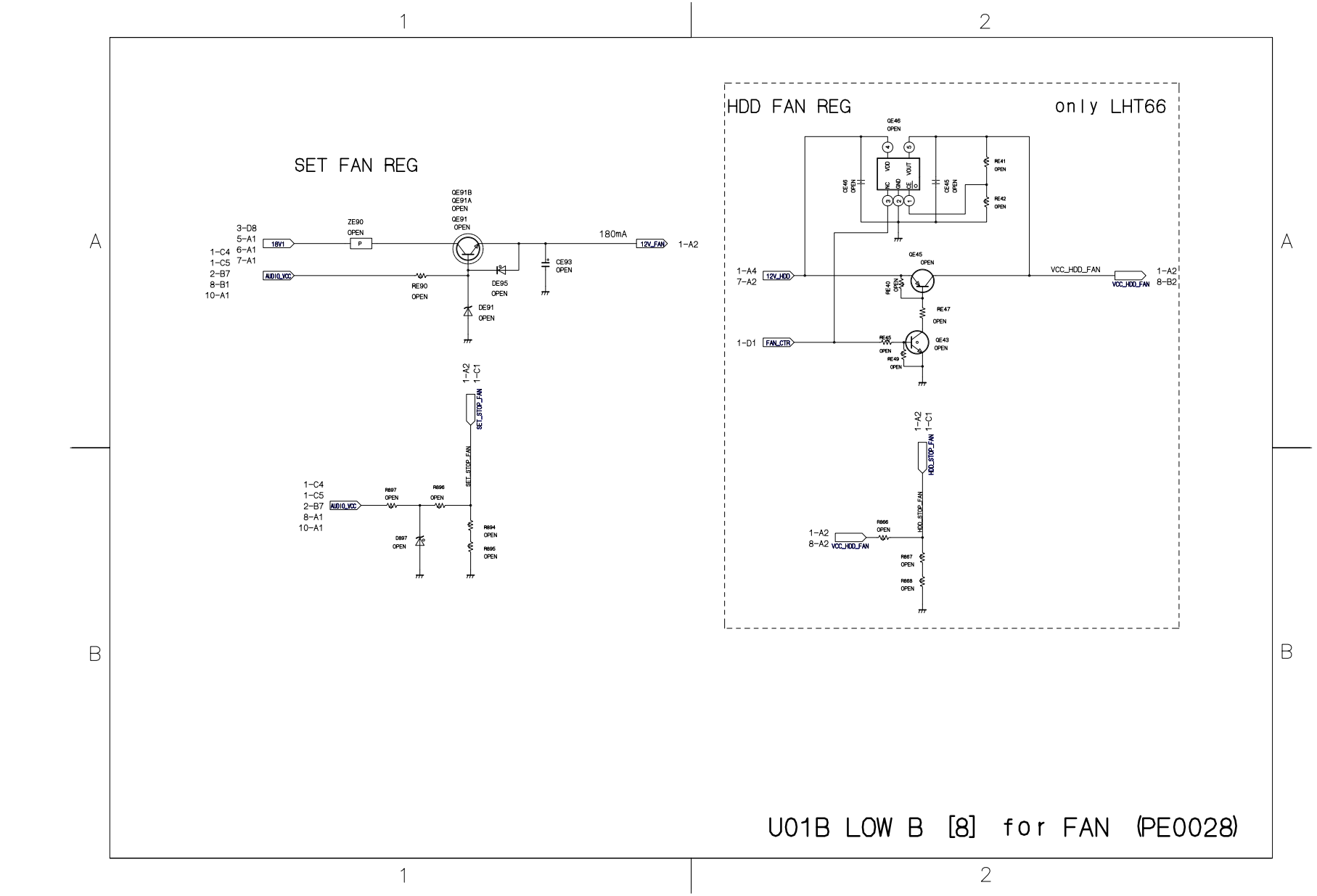
U01B LOW B [5] REGULATOR 1 (PE0028)



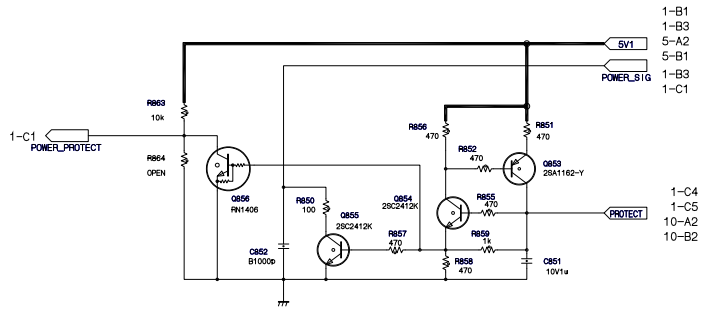
U01B LOW B [6] for UK DIGITAL (PE0028)



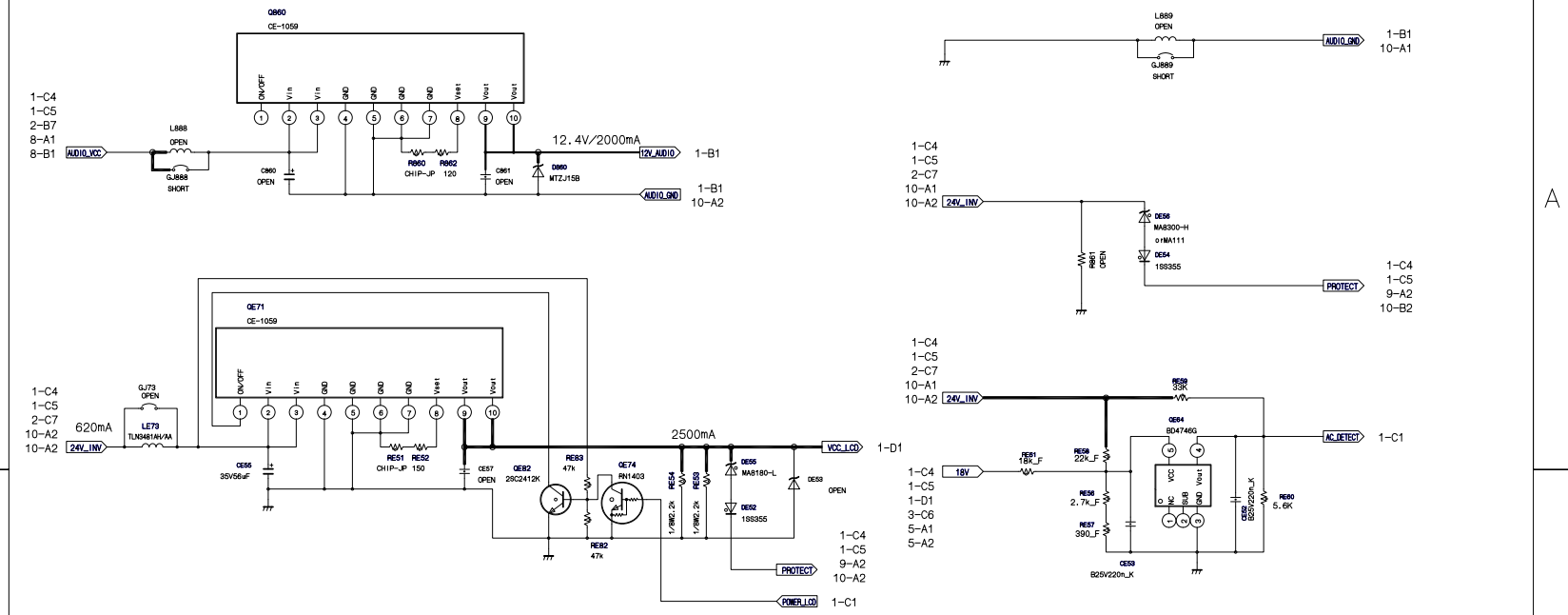
U01B LOW B [7] for HDD (PE0028)



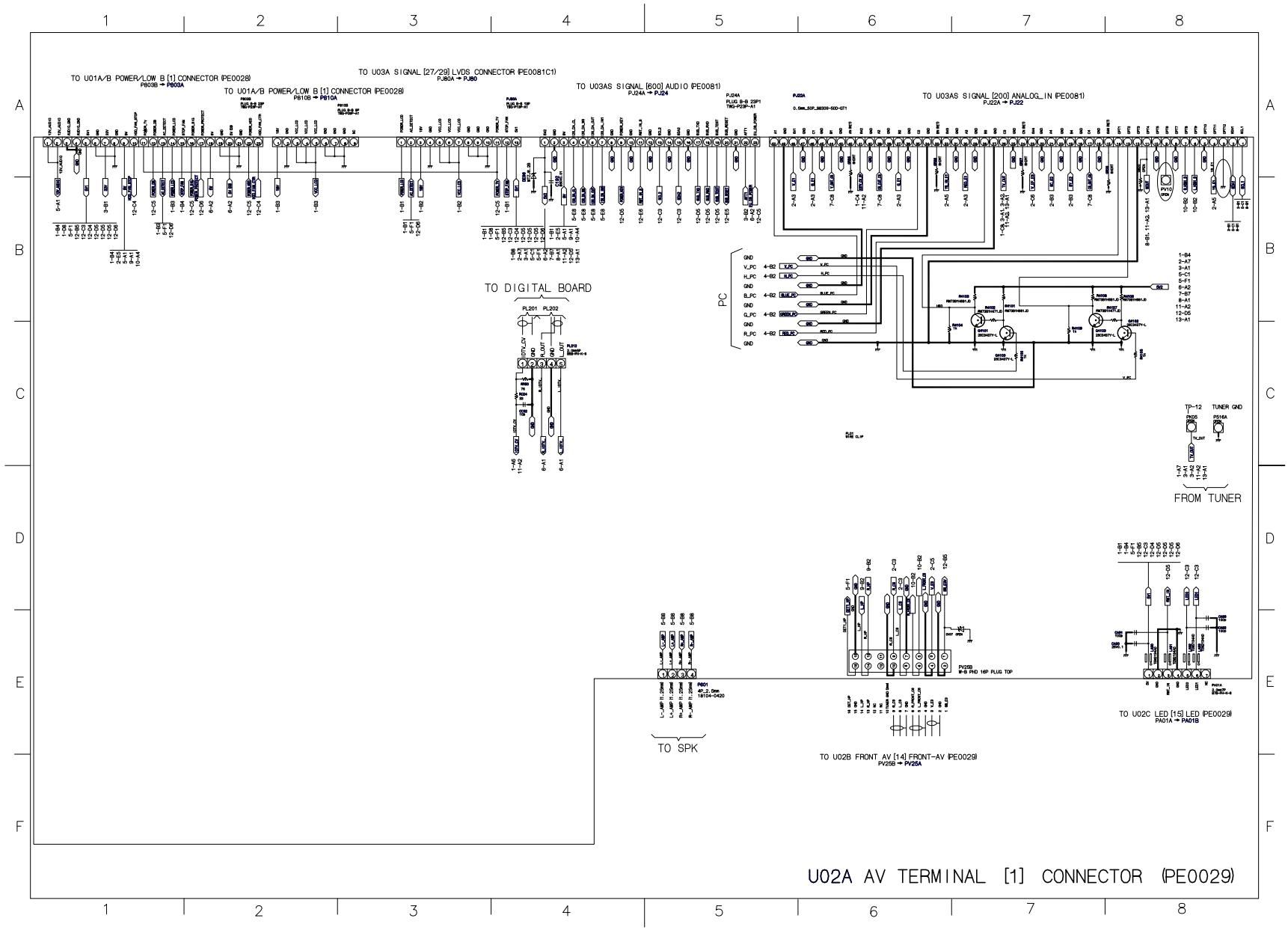
U01B LOW B [8] for FAN (PE0028)

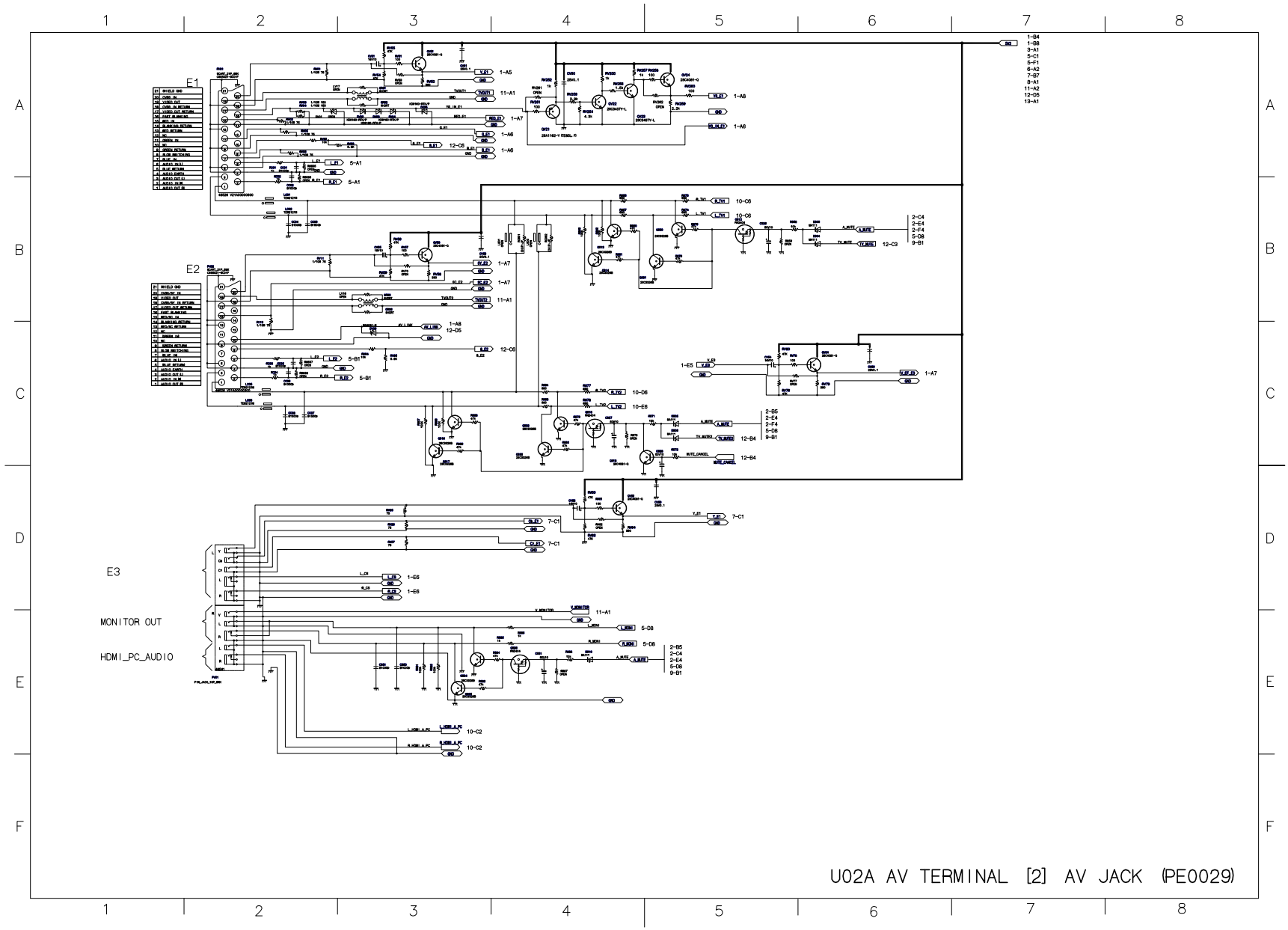


U01B LOW B [9] PROTECTER (PE0028)

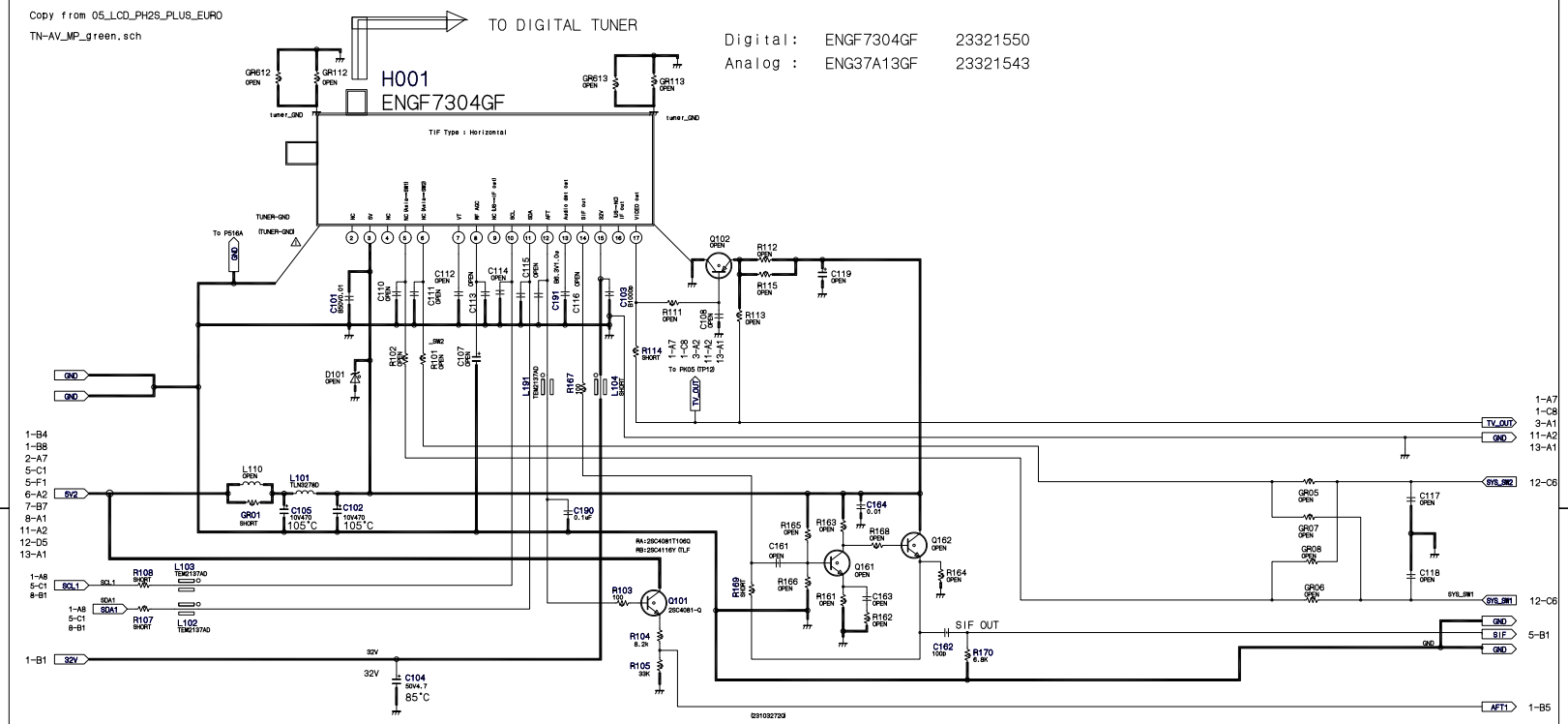


U01B LOW B [10] REGULATOR 2 (PE0028)


TO U01A/B POWER/LOW B [1] CONNECTOR (PE0028)
P803B → P803A
TO U01A/B POWER/LOW B [1] CONNECTOR (PE0028)
P810B → P810A
TO U03A SIGNAL [27/29] LVDS CONNECTOR (PE0081C1)
PJ80A → PJ80
TO U03AS SIGNAL [600] AUDIO (PE0081)
PJ24A → PJ24
TO U03AS SIGNAL [200] ANALOG_IN (PE0081)
PJ22A → PJ22
TO DIGITAL BOARD
PC
FROM TUNER
TUNER GND
TO SPK
TO U02B FRONT_AV [14] FRONT-AV (PE0029)
PV25B → PV25A
TO U02C LED [15] LED (PE0029)
PA01A → PA01B
U02A AV TERMINAL [1] CONNECTOR (PE0029)

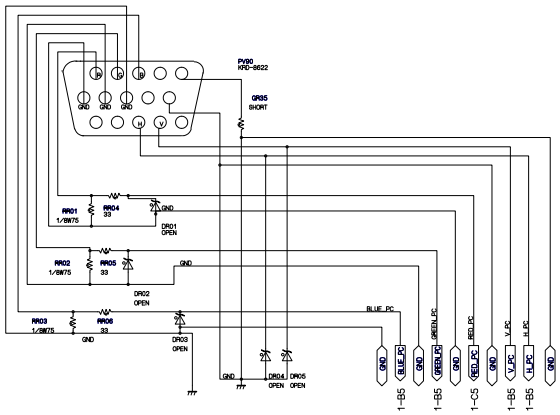


U02A AV TERMINAL [2] AV JACK (PE0029)



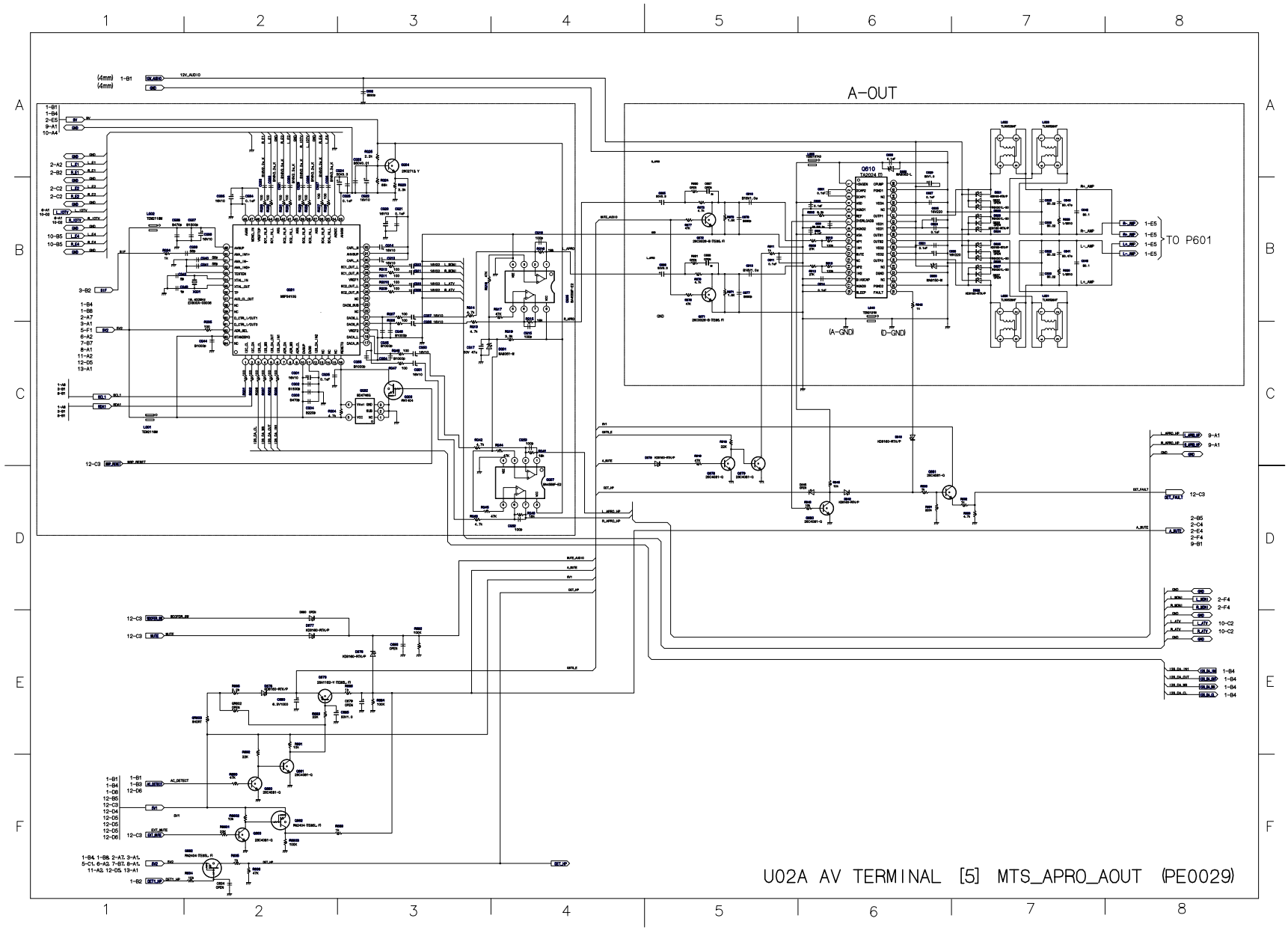
U02A AV TERMINAL [3] TUNER (PE0029)

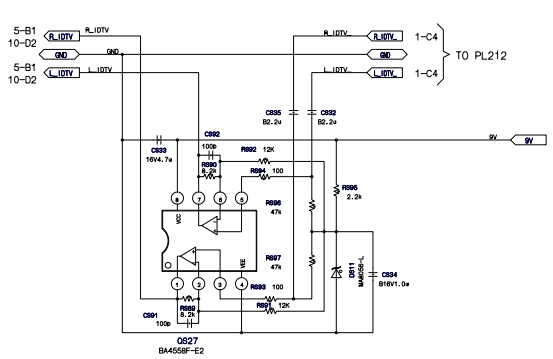
PC-DSUB

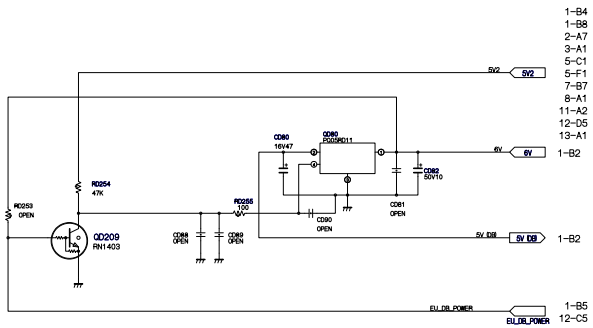


U02A AV TERMINAL [4] PC-INPUT (PE0029)

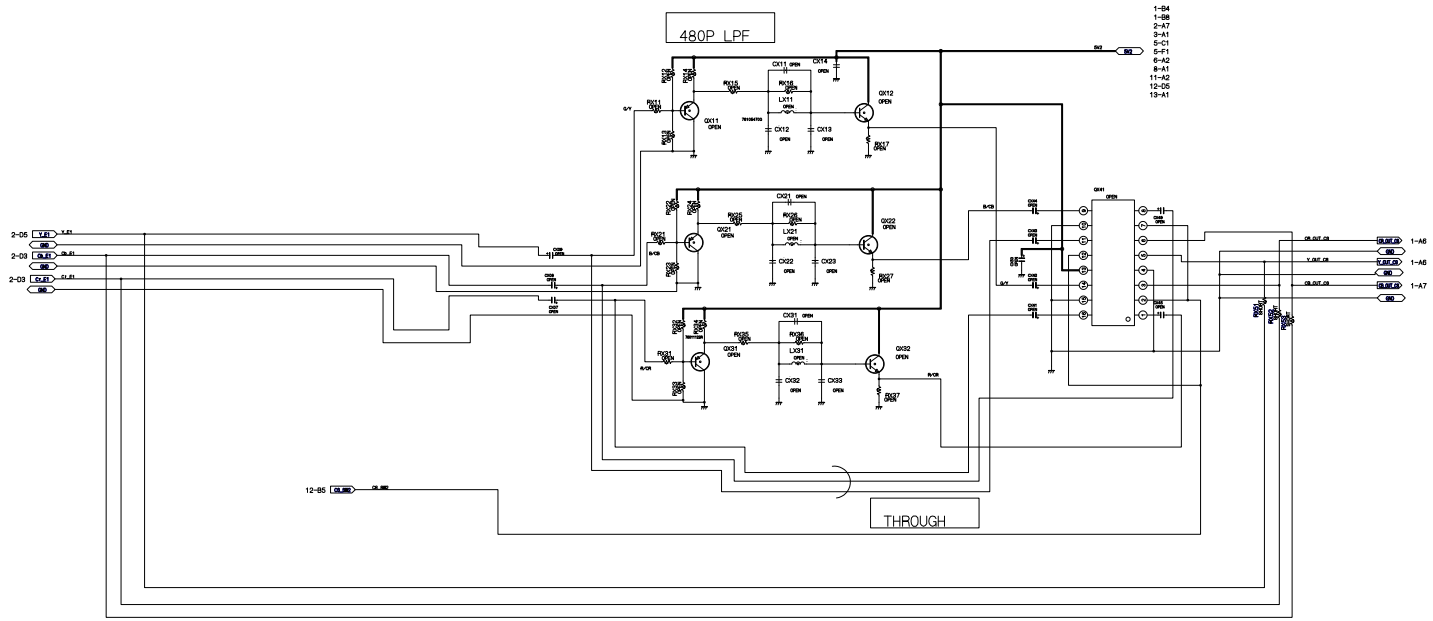
DRAWINGNAME


A-OUT
TO P601
U02A AV TERMINAL [5] MTS_APRO_AOUT (PE0029)

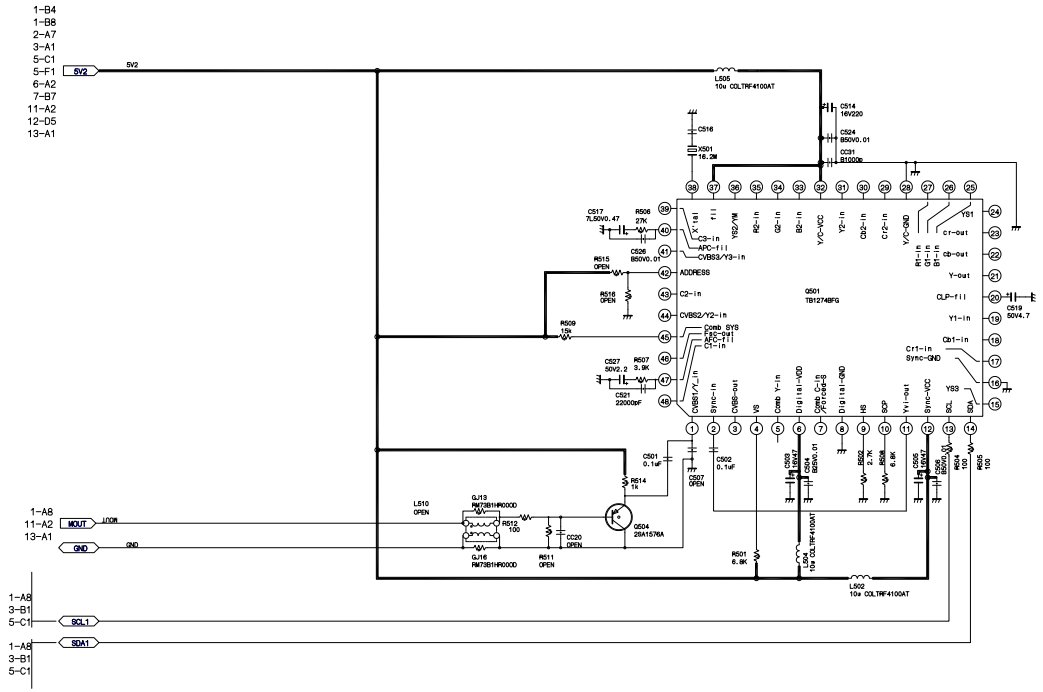




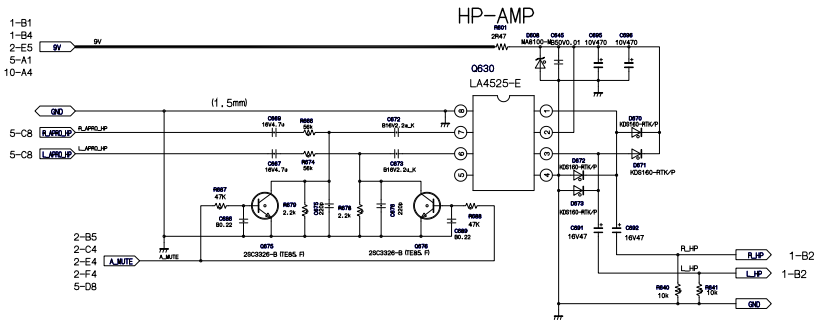
U02A AV TERMINAL [6] EU_DIGITAL_INTERFACE (PE0029)



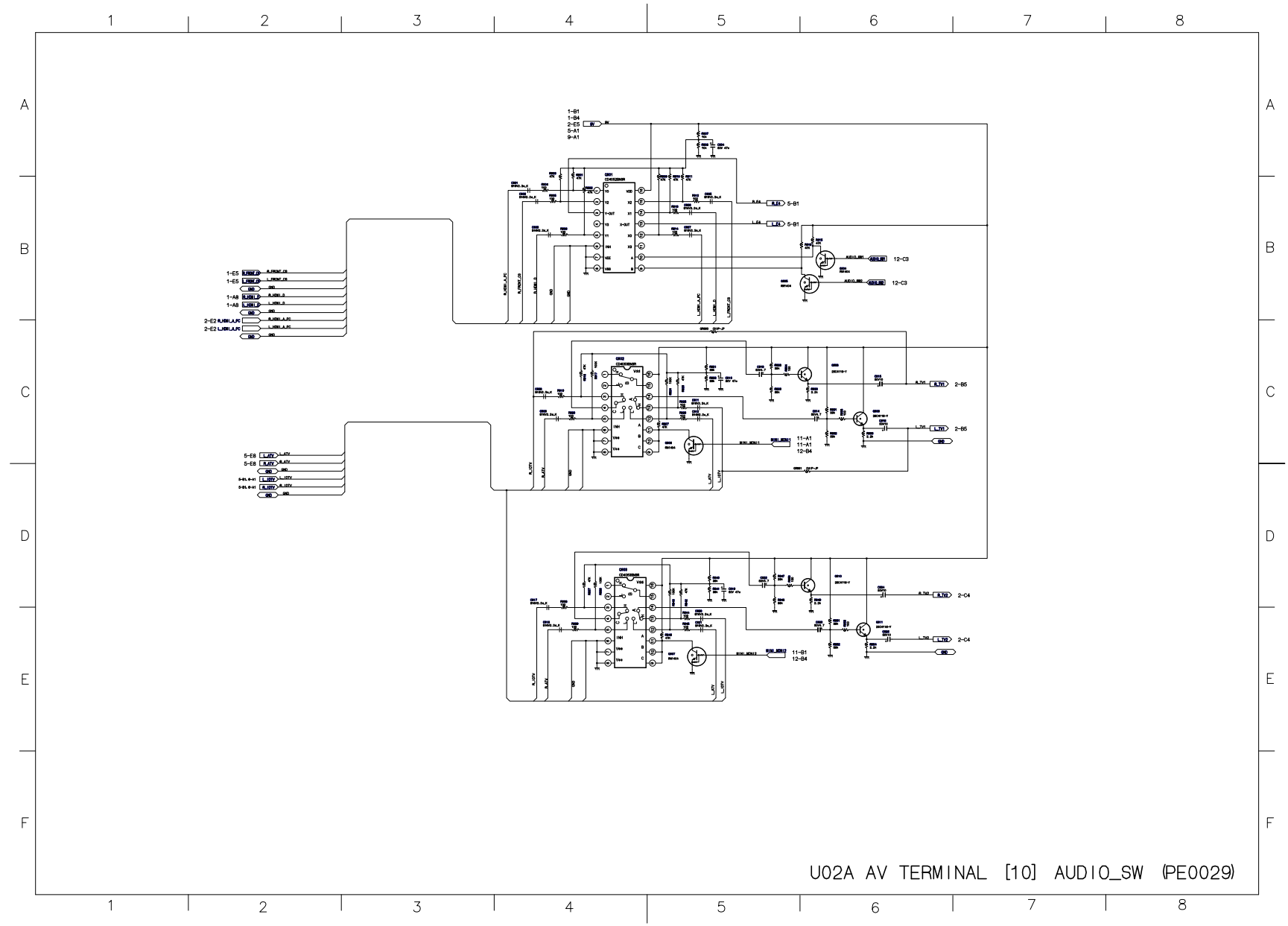
U02A AV TERMINAL [7] COLOUR STREAM SW (PE0029)



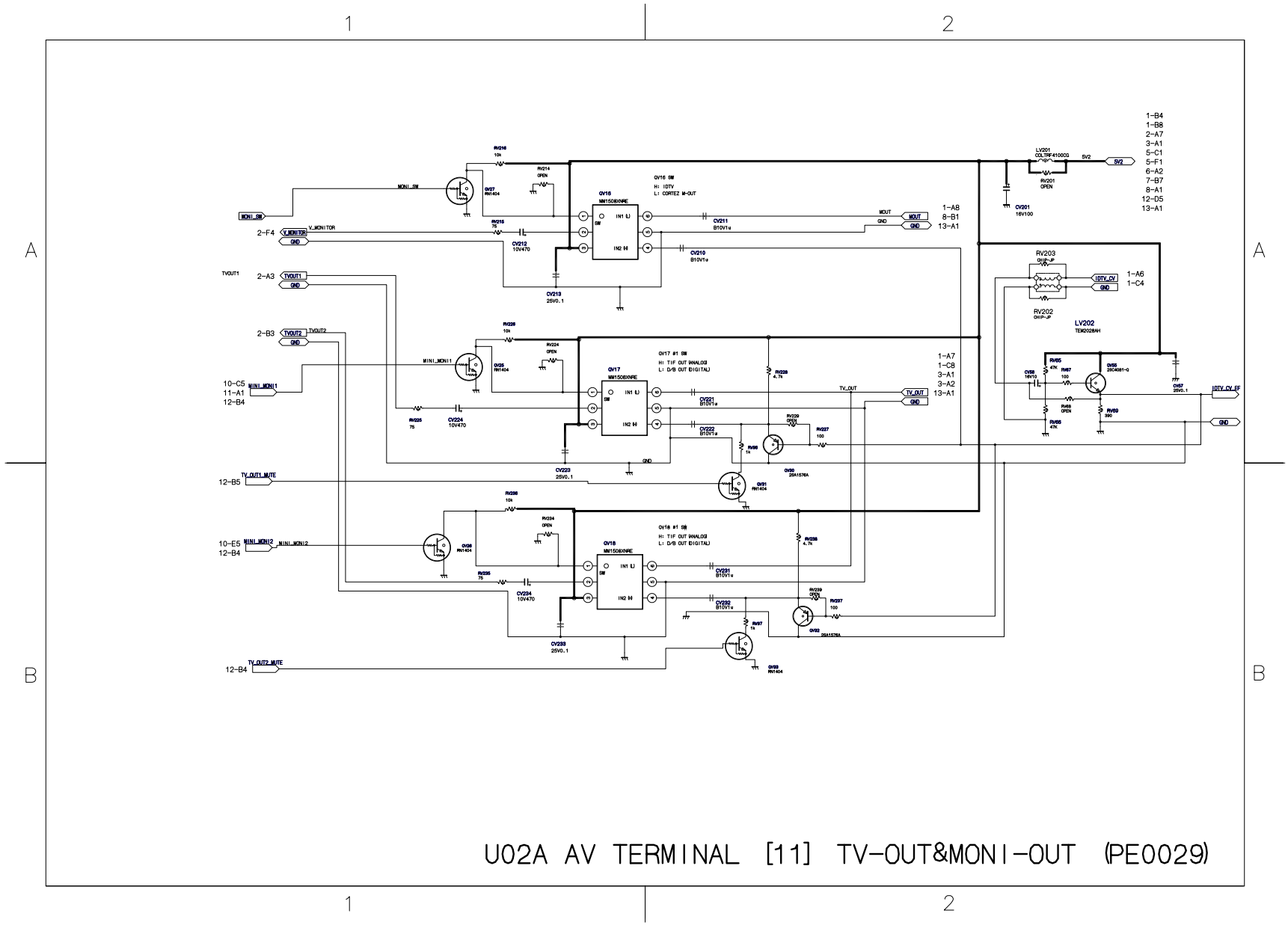
U02A AV TERMINAL [8] COLOUR_DECORDER (PE0029)

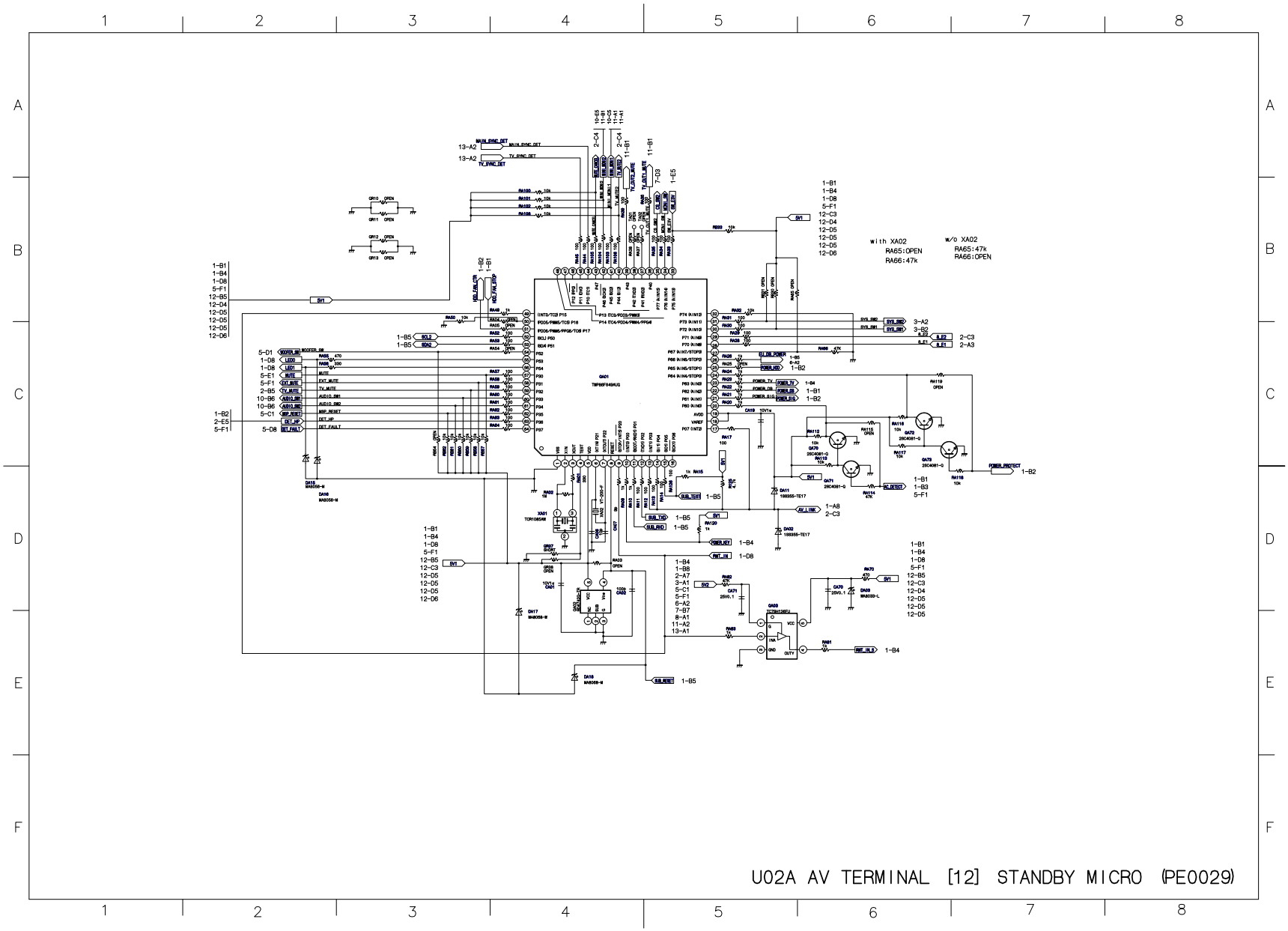


U02A AV TERMINAL [9] HEADPHONE_AMP (PE0029)

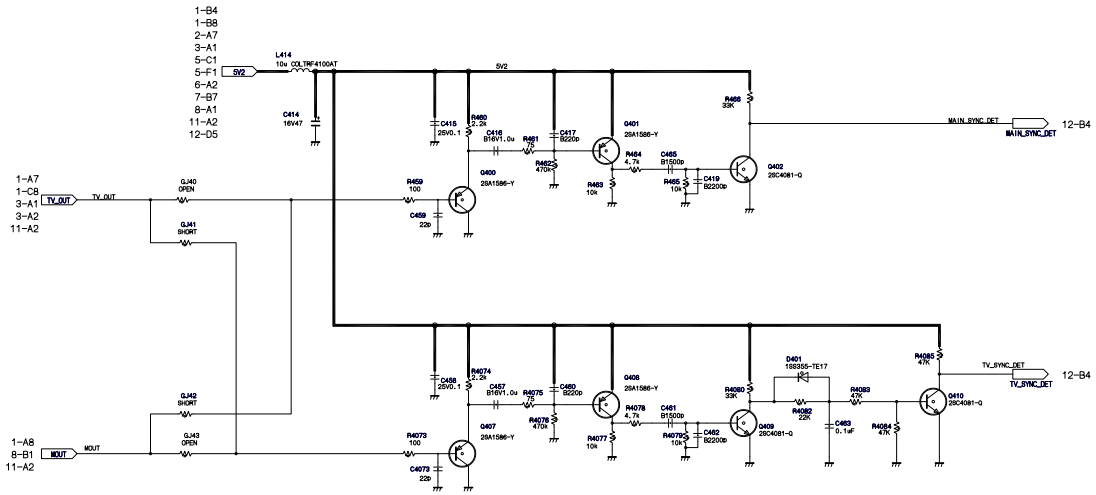


U02A AV TERMINAL [10] AUDIO_SW (PE0029)

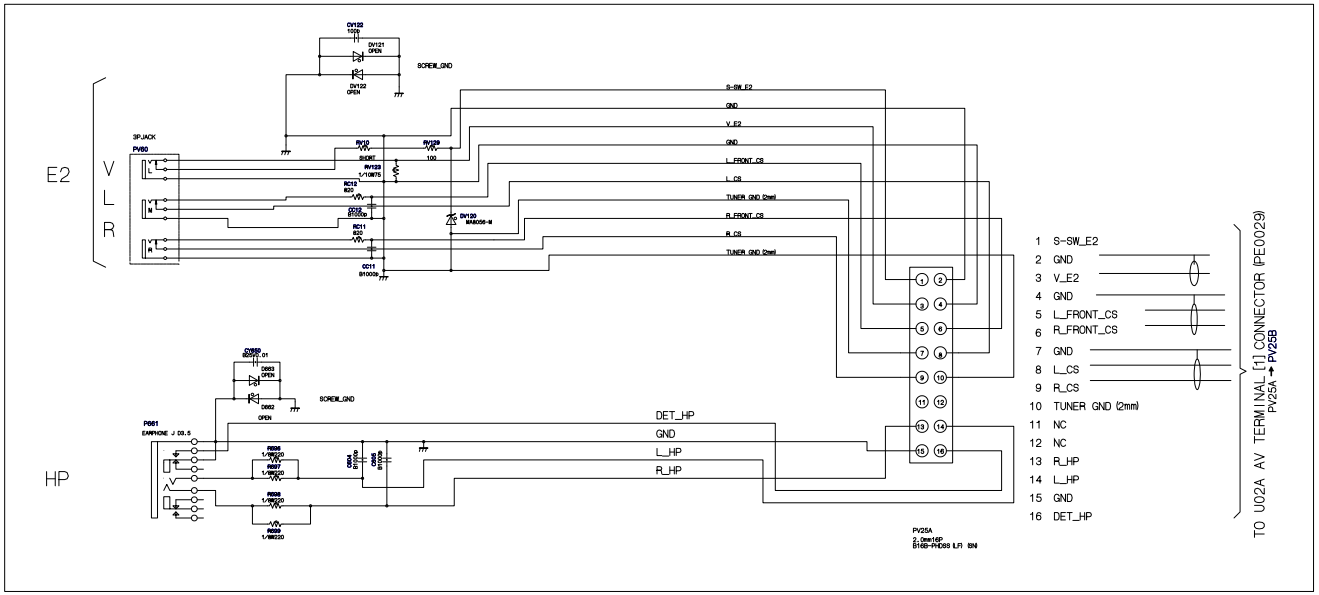

1
2
A
B
U02A AV TERMINAL [11] TV-OUT&MONI-OUT (PE0029)



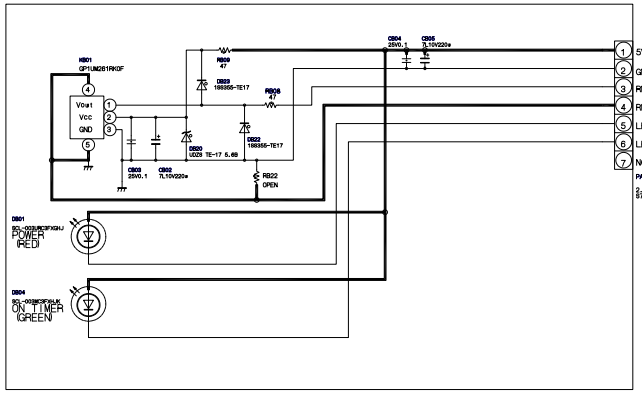
U02A AV TERMINAL [12] STANDBY MICRO (PE0029)



U02A AV TERMINAL [13] SYNC_DET (PE0029)



U02B FRONT AV [14] FRONT-AV (PE0029)

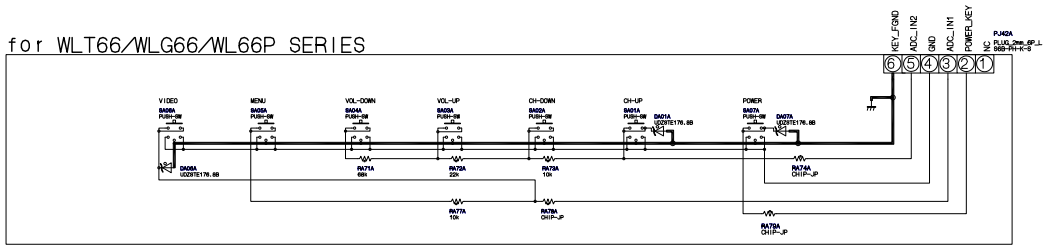


TO U02A AV TERMINAL [1] CONNECTOR (PE0029)
PA01B → PA01A

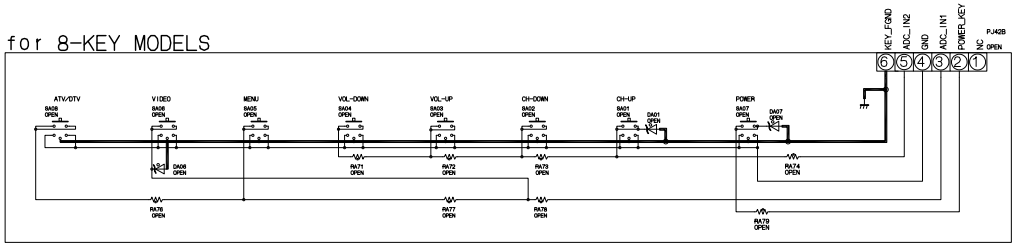
U02C LED [15] LED (PE0029)

TO U03AS SIGNAL [404] E2P ROM OTHER (PE0081)
PJ42A → PJ42

for WLT66/WLG66/WL66P SERIES

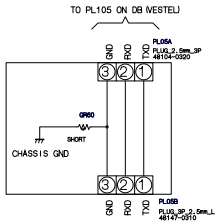


for 8-KEY MODELS

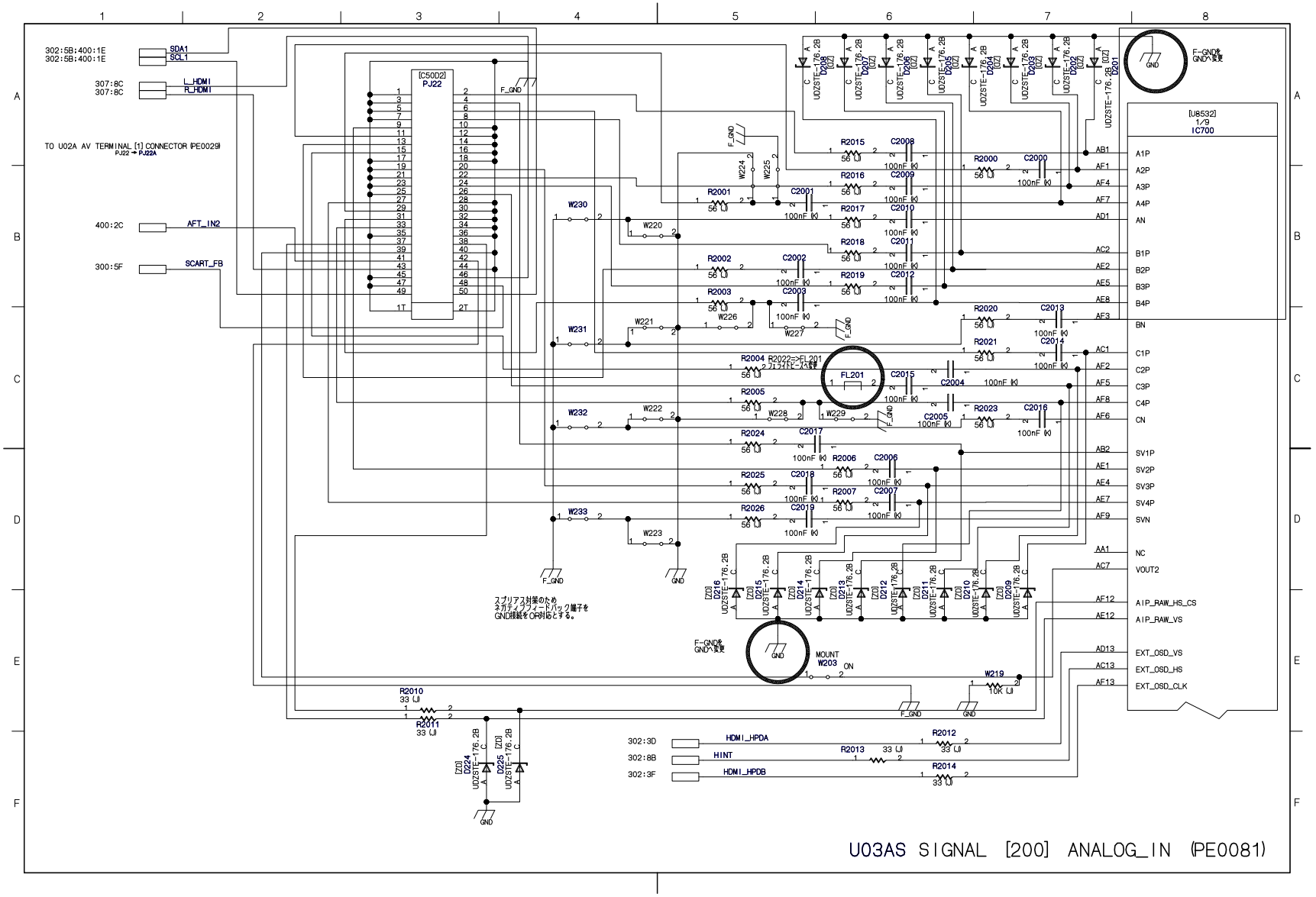


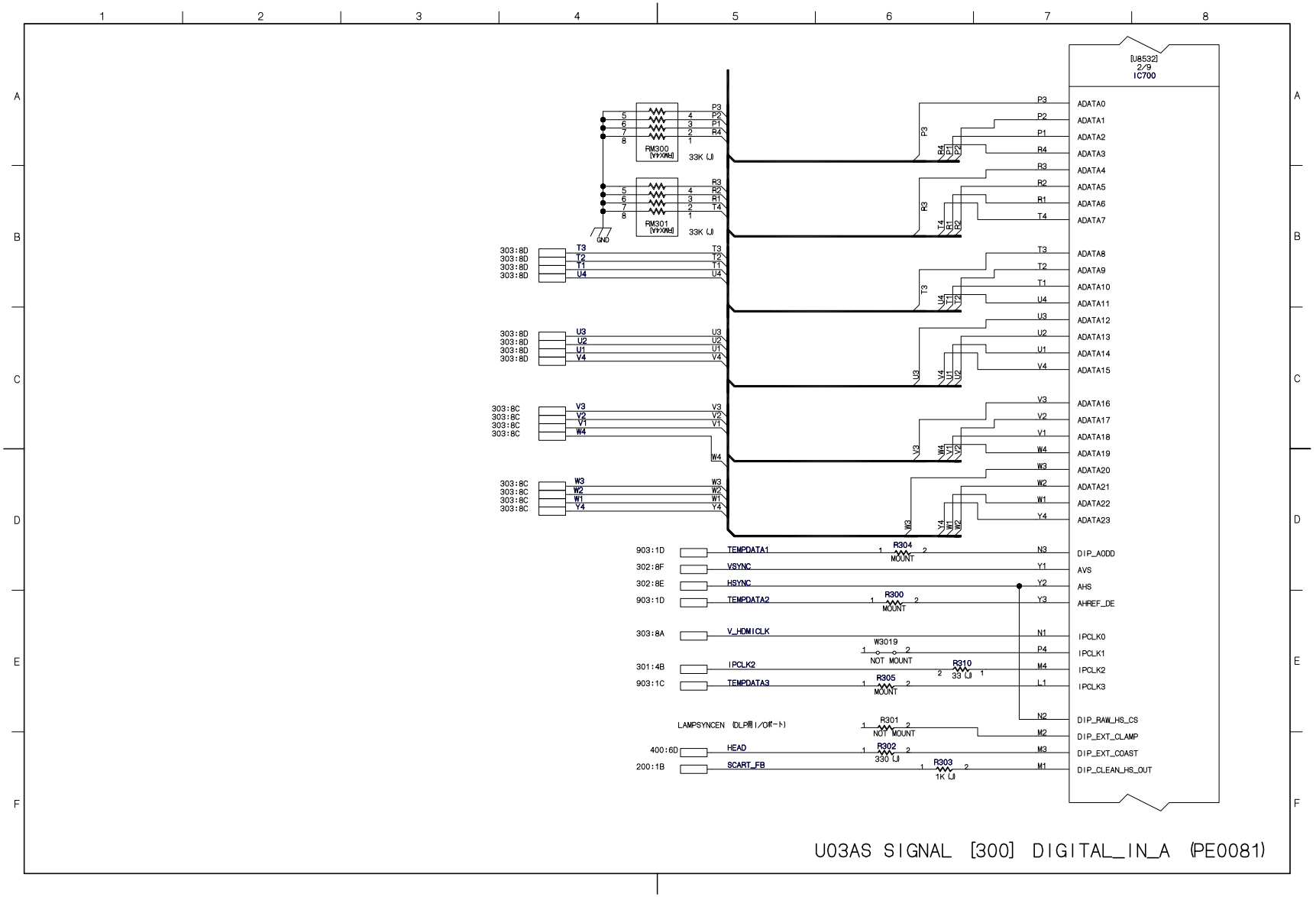
U02E 7-KEY [16] KEY (PE0029)

for WLT66 and WLG66 SERIES

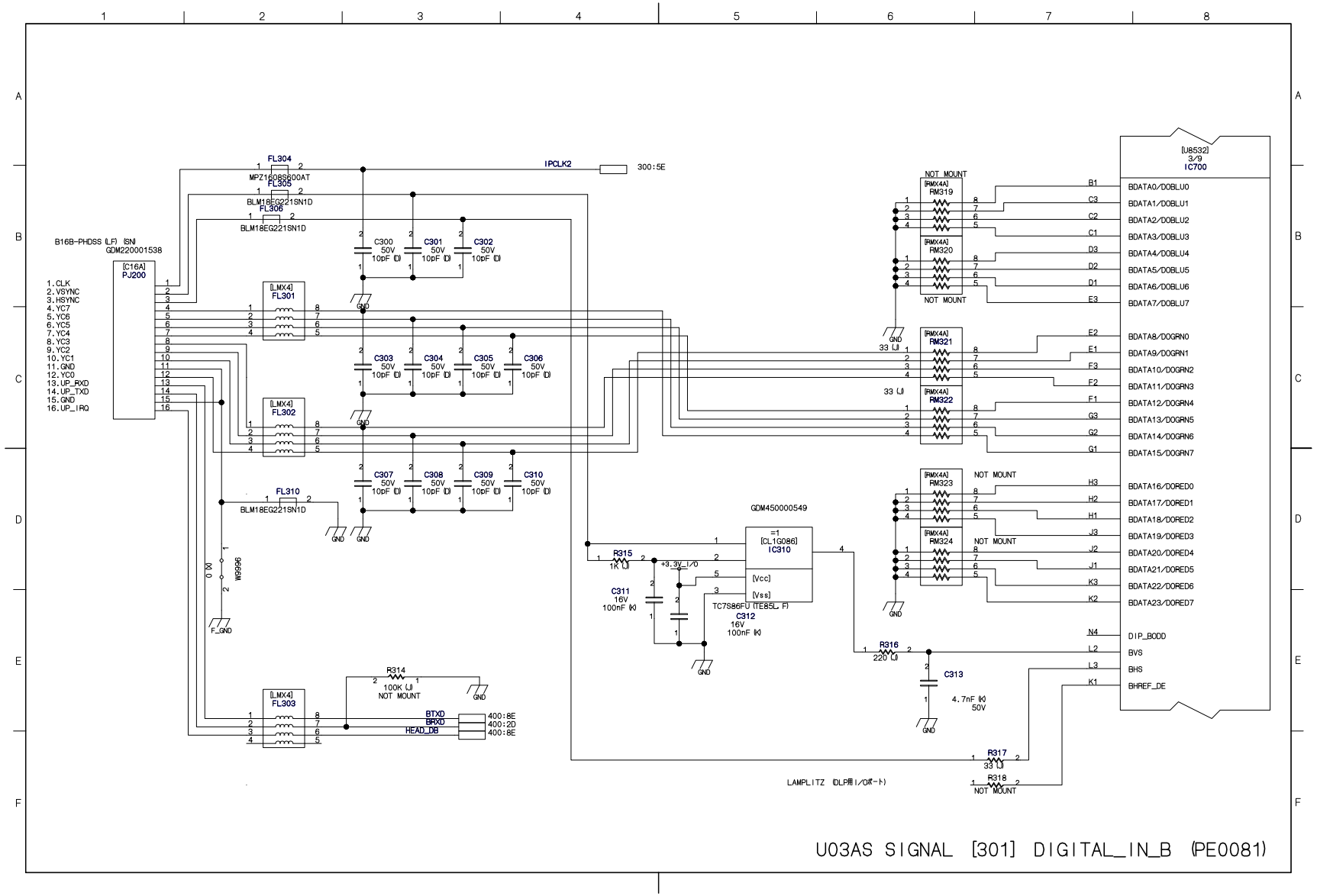


U02F DB_DOWNLOAD [17] DB DOWNLOAD (PE0029)

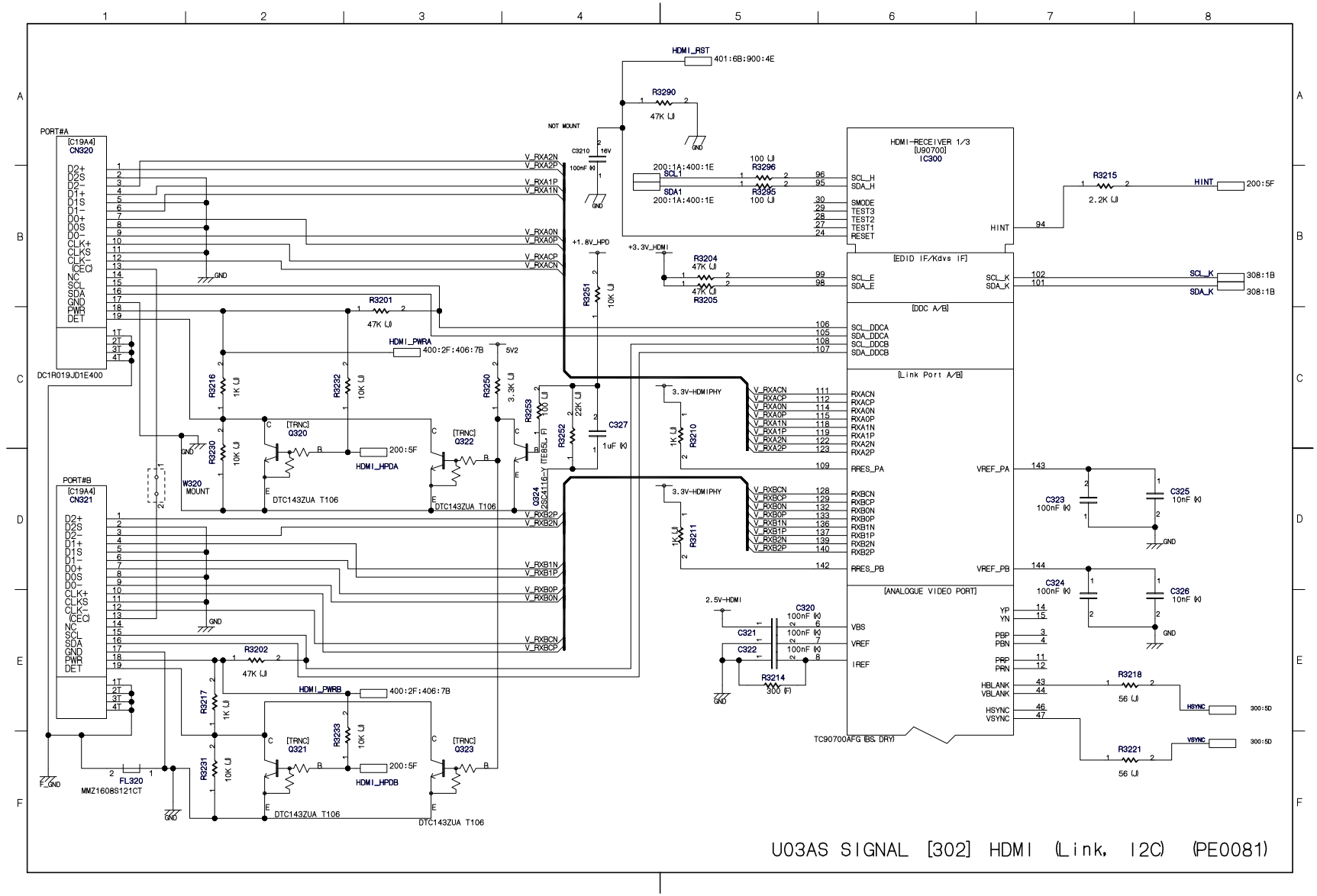

U03AS SIGNAL [200] ANALOG_IN (PE0081)
SDA1
SCL1
L_HDMI
R_HDMI
AFT_IN2
SCART_FB
TO U02A AV TERMINAL [1] CONNECTOR (PE0029)
PJ22 → PJ22A
[C50D2]
PJ22
F_GND
[U8532]
1/9
IC700
HDMI_HPDA
HINT
HDMI_HPDB
MOUNT
W203 ON
スプリアス対策のため
コモンフィードバック端子を
GND接続をOPN対応とする。
AIP_RAW_HS_CS
AIP_RAW_VS
EXT_OSD_VS
EXT_OSD_HS
EXT_OSD_CLK

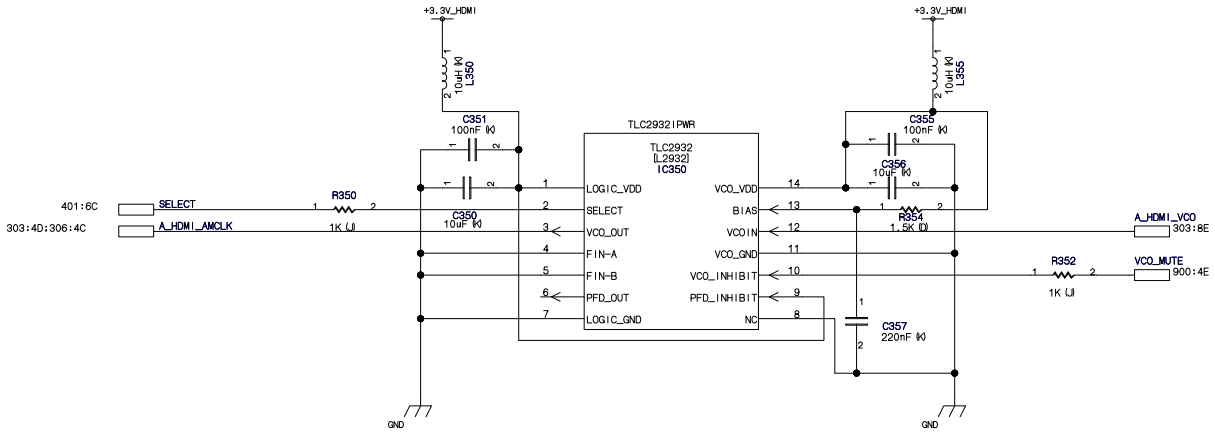


U03AS SIGNAL [300] DIGITAL_IN_A (PE0081)

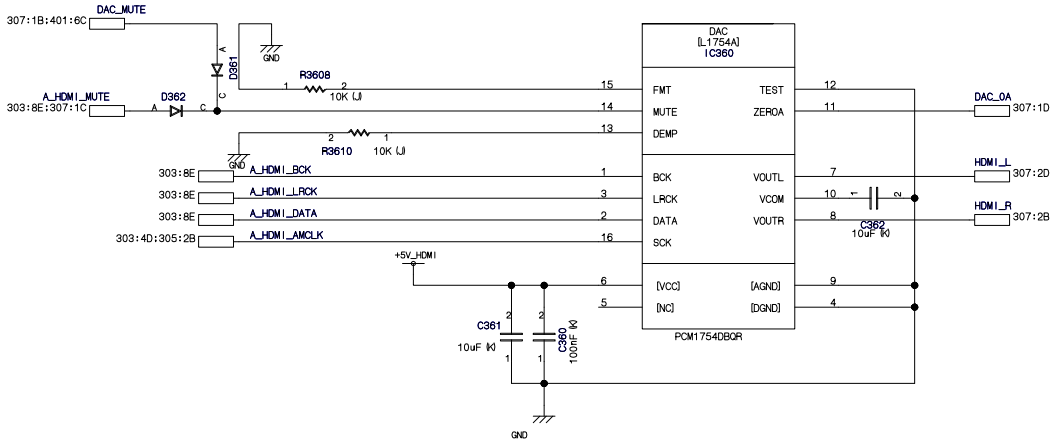


U03AS SIGNAL [301] DIGITAL_IN_B (PE0081)

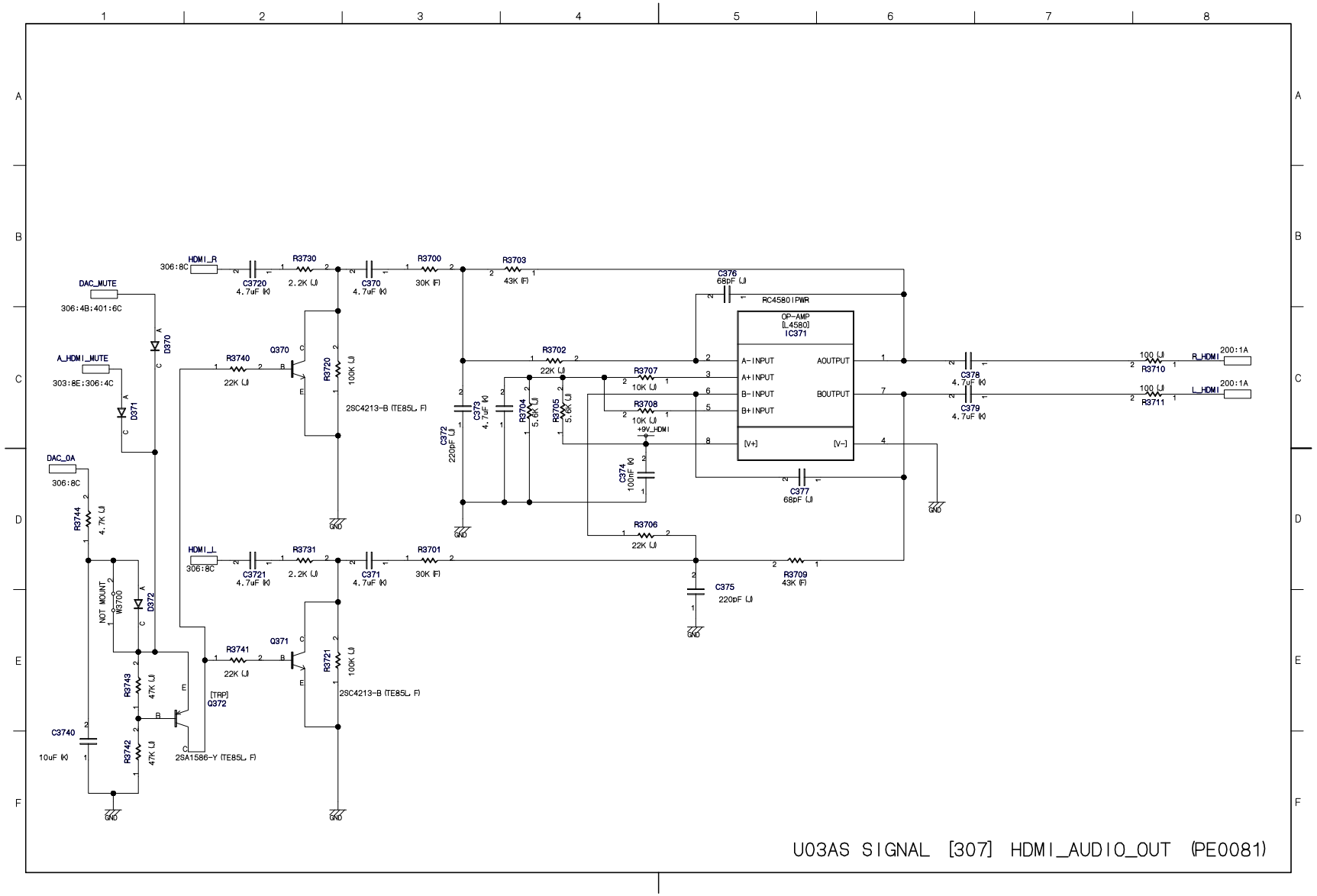

HDMI_RST
401:6B:900:4E
R3290
47K (J)
NOT MOUNT
C3210
16V
100nF (K)
HDMI-RECEIVER 1/3
[U90700]
IC300
PORT#A
[C19A4]
CN320
DC1R019JD1E400
PORT#B
[C19A4]
CN321
W320
MOUNT
FL320
MMZ1608S121CT
F_GND
GND
HDMI_PWRA
400:2F:406:7B
5V2
HDMI_PWRB
400:2F:406:7B
HDMI_HPDA
HDMI_HPDB
200:5F
R3201
47K (J)
R3202
47K (J)
R3204
47K (J)
R3205
47K (J)
R3251
10K (J)
+1.8V_HPD
+3.3V_HDMI
R3215
2.2K (J)
HINT
200:5F
SCL_K
SDA_K
308:1B
R3216
1K (J)
R3230
10K (J)
R3232
10K (J)
R3250
3.3K (J)
R3253
100 (J)
R3252
22K (J)
C327
1uF (K)
Q320
Q322
Q324
DTC143ZUA T106
R3217
1K (J)
R3231
10K (J)
R3233
10K (J)
Q321
Q323
R3210
1K (J)
R3211
1K (J)
3.3V-HDMIPHY
2.5V-HDMI
C320
C321
C322
100nF (K)
R3214
300 (F)
R3296
100 (J)
R3295
100 (J)
200:1A:400:1E
SCL1
SDA1
C323
100nF (K)
C324
100nF (K)
C325
10nF (K)
C326
10nF (K)
R3218
56 (J)
R3221
56 (J)
HSYNC
VSYNC
300:5D
[EDID IF/Kdvs IF]
[DDC A/B]
[Link Port A/B]
[ANALOGUE VIDEO PORT]
TC90700AFG (BS DRY)
U03AS SIGNAL [302] HDMI (Link, I2C) (PE0081)



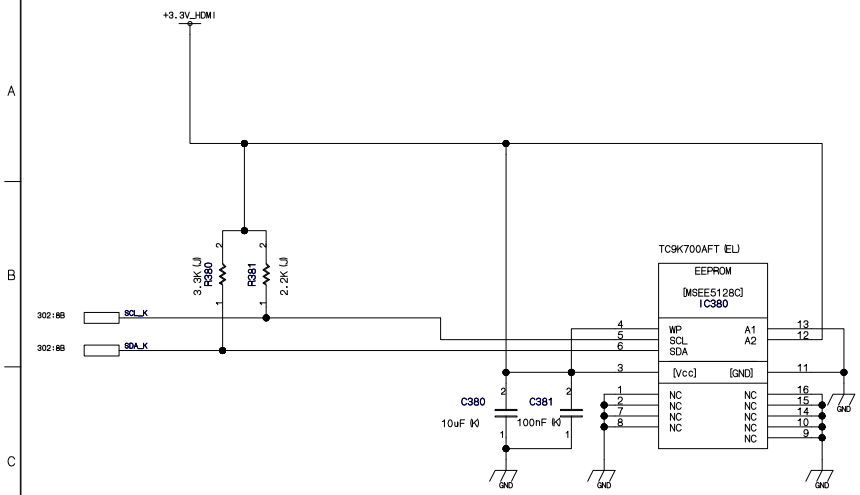
U03AS SIGNAL [305] HDMI AUDIO_PLL (PE0081)



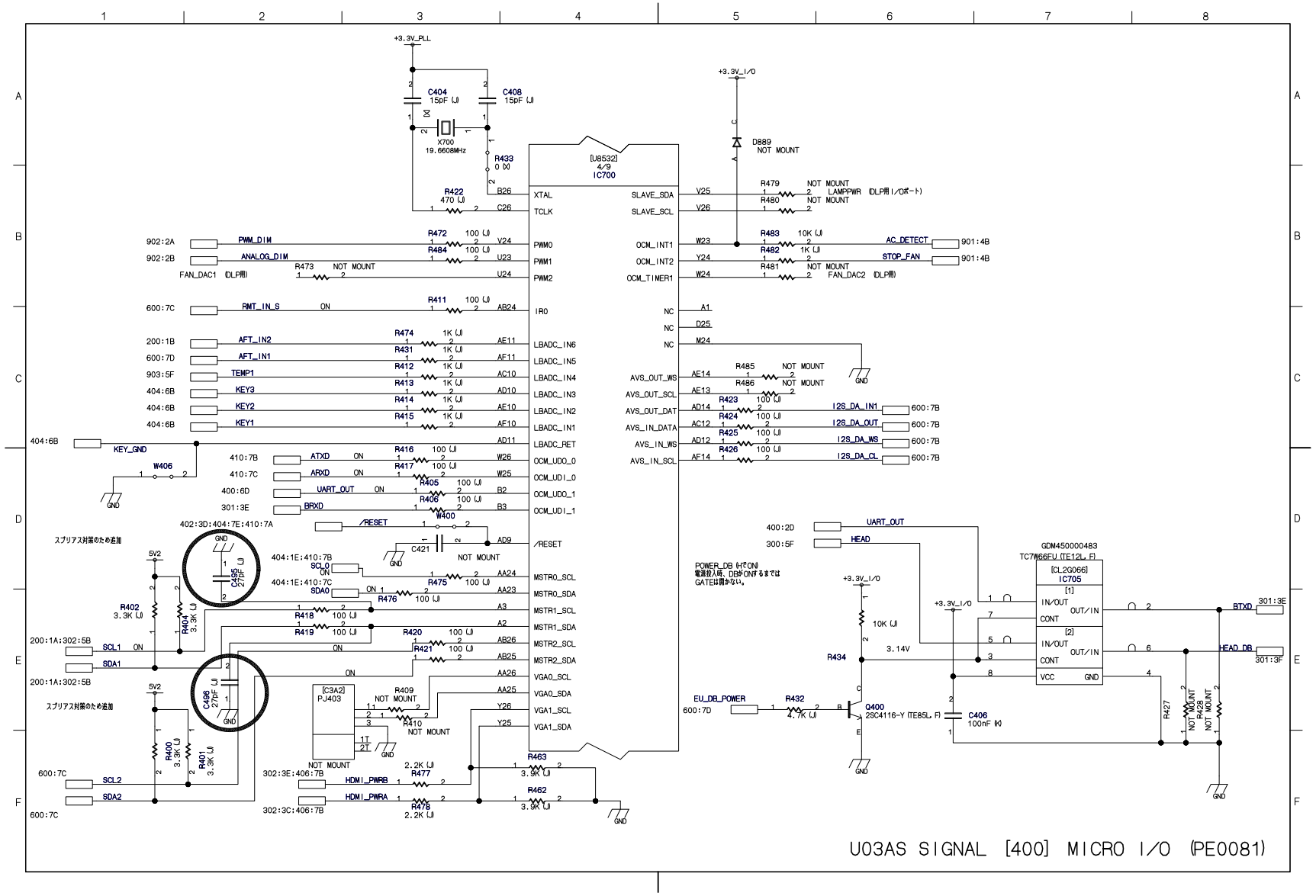
U03AS SIGNAL [306] HDMI_AUDIO_DAC (PE0081)



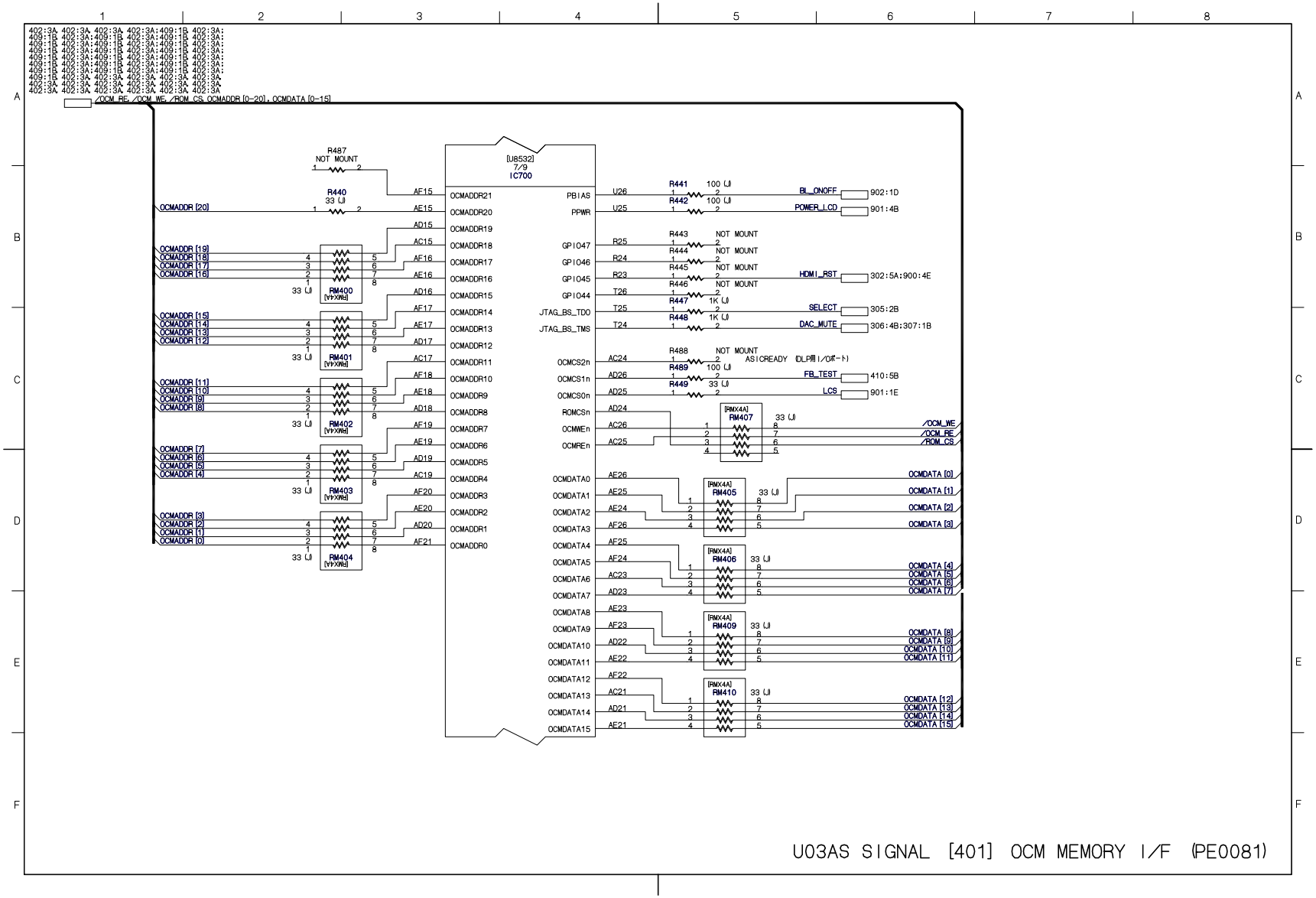
U03AS SIGNAL [307] HDMI_AUDIO_OUT (PE0081)



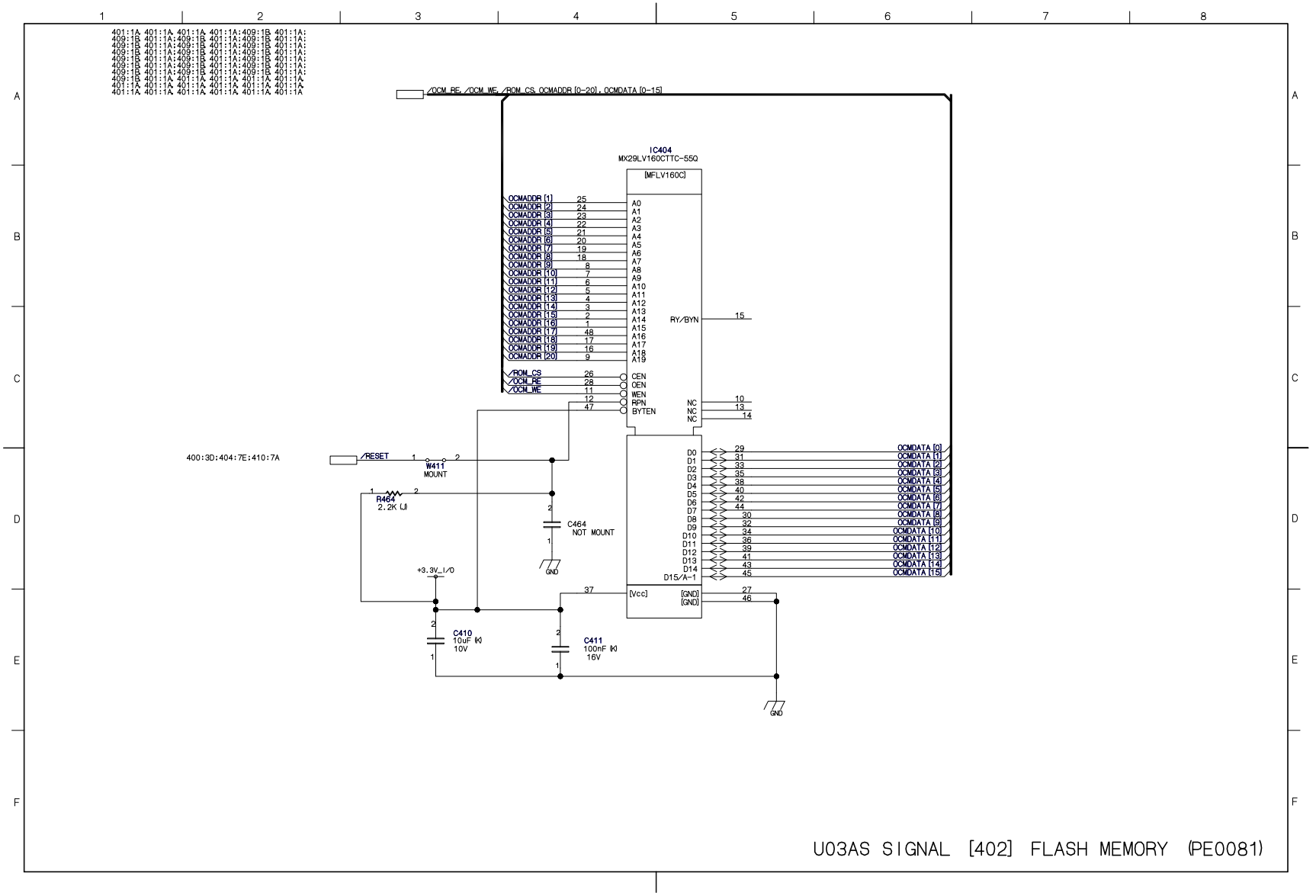
U03AS SIGNAL [308] HDMI EEPROM (HDCP) (PE0081)



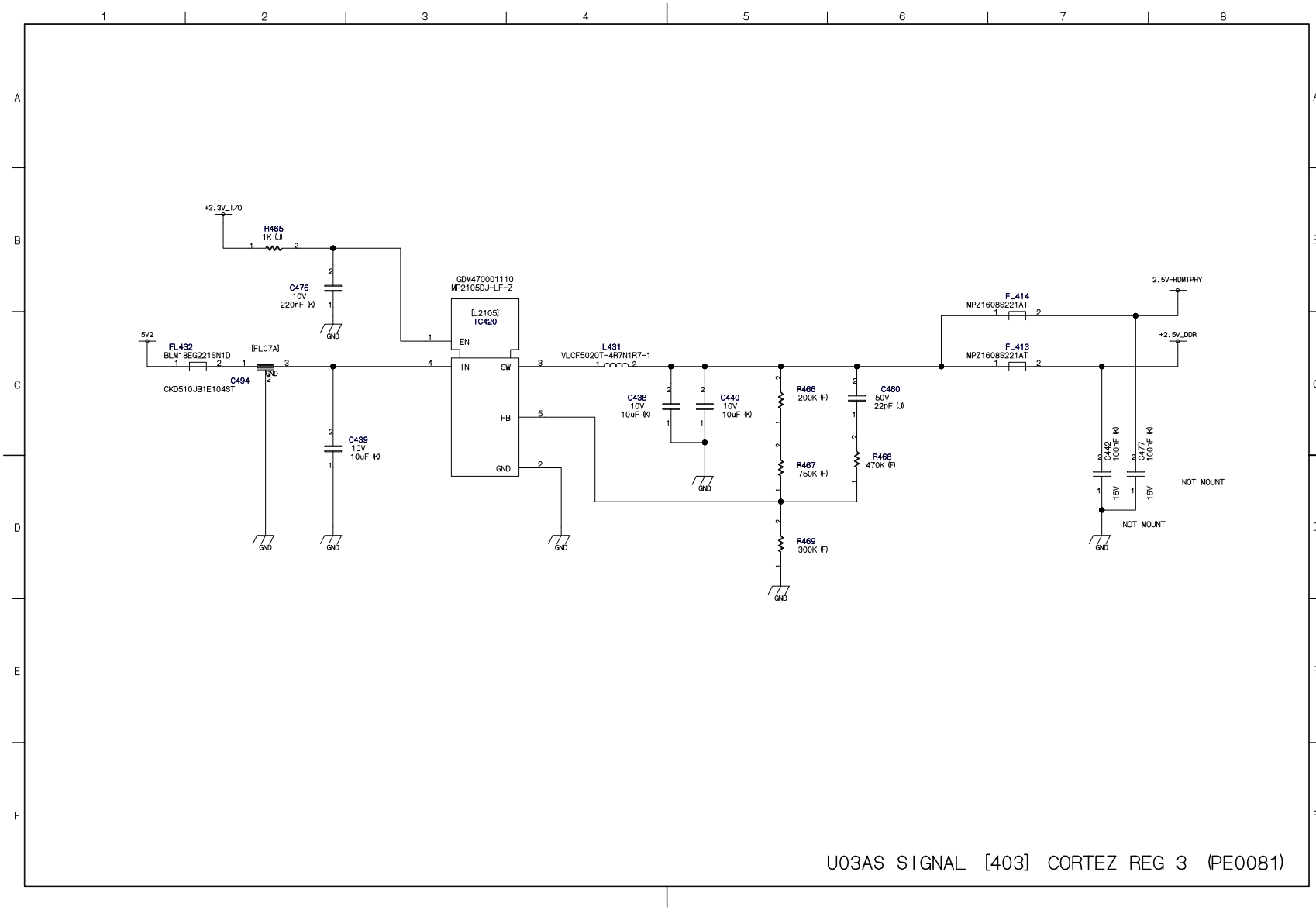
U03AS SIGNAL [400] MICRO I/O (PE0081)



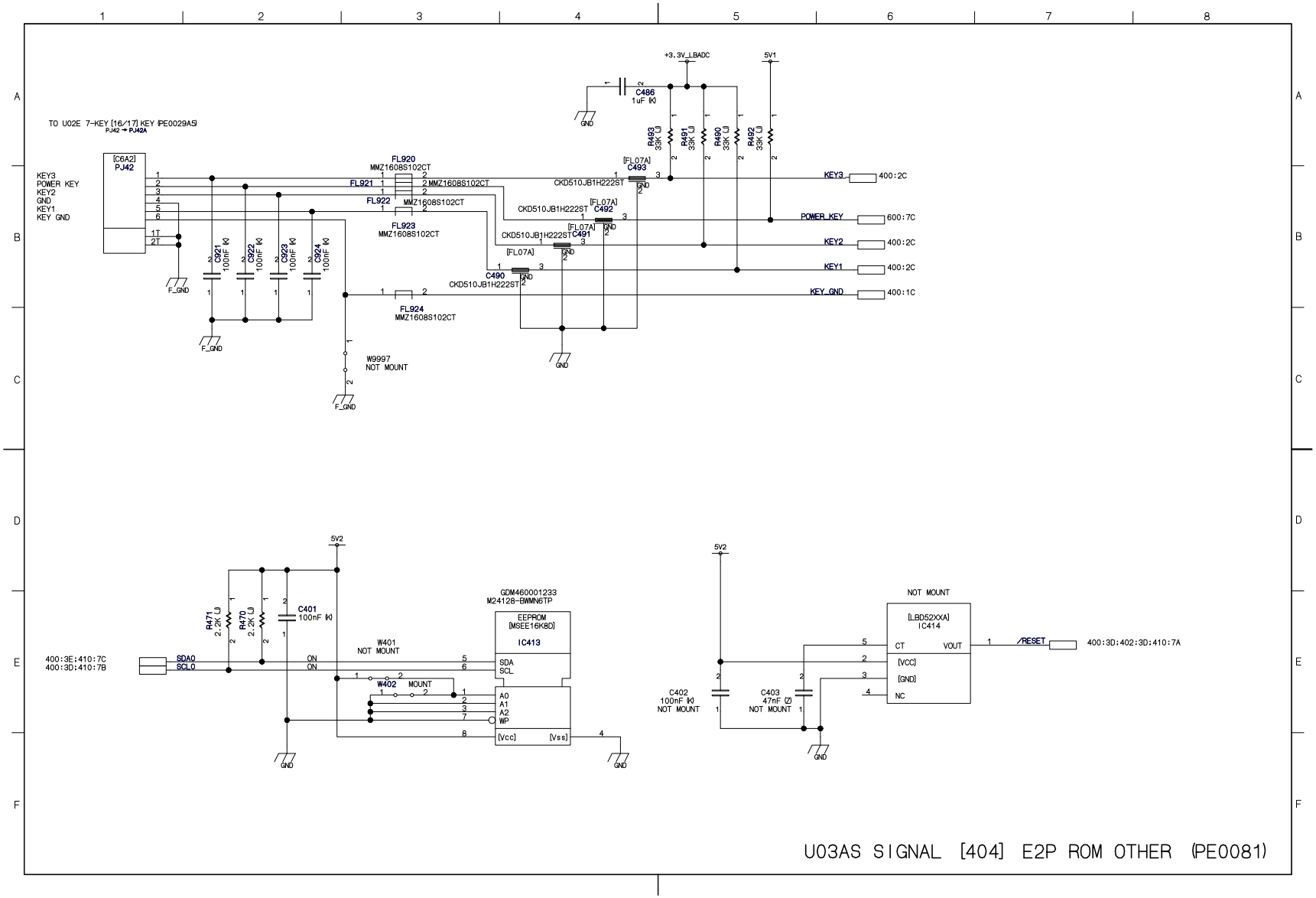
U03AS SIGNAL [401] OCM MEMORY I/F (PE0081)



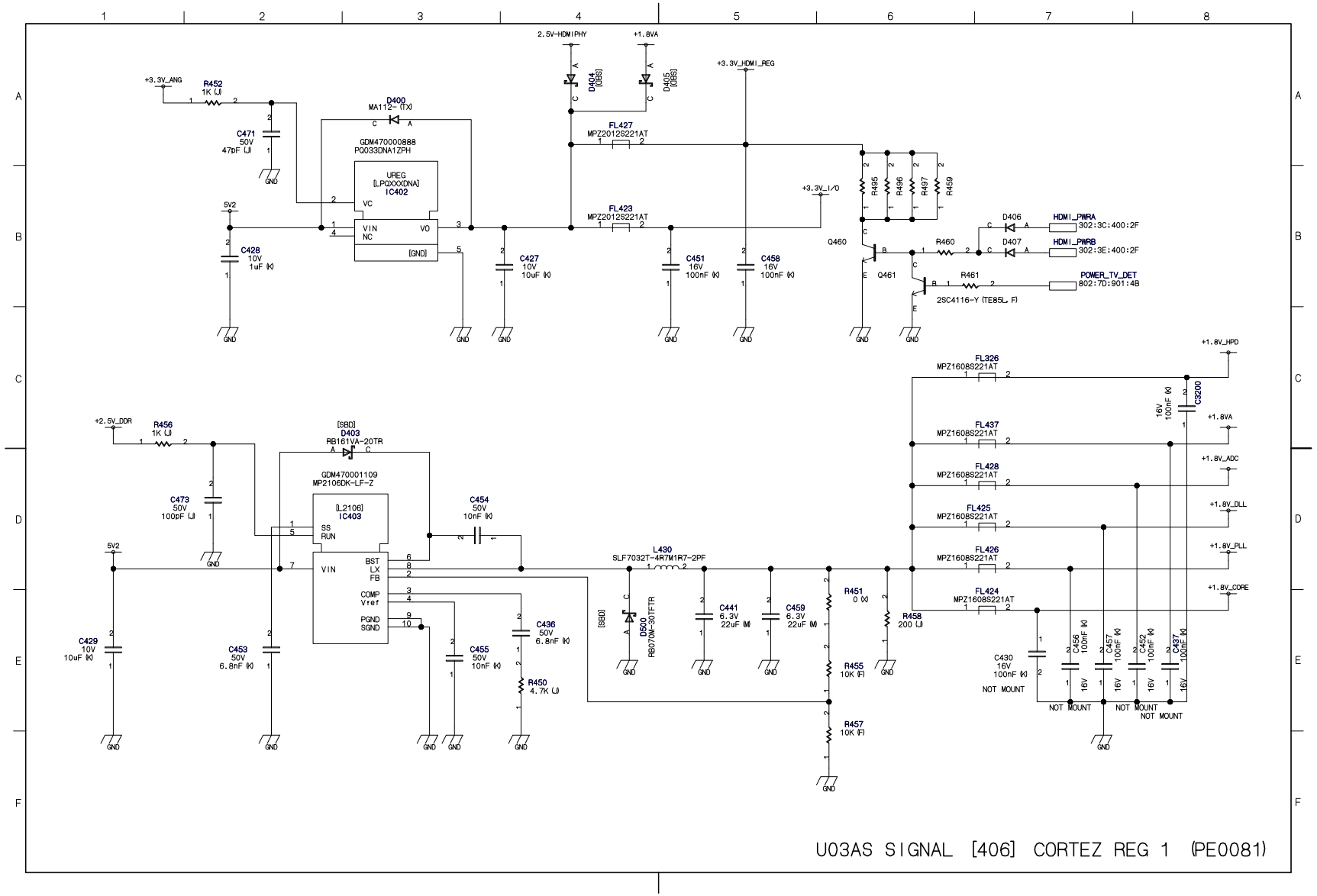
U03AS SIGNAL [402] FLASH MEMORY (PE0081)



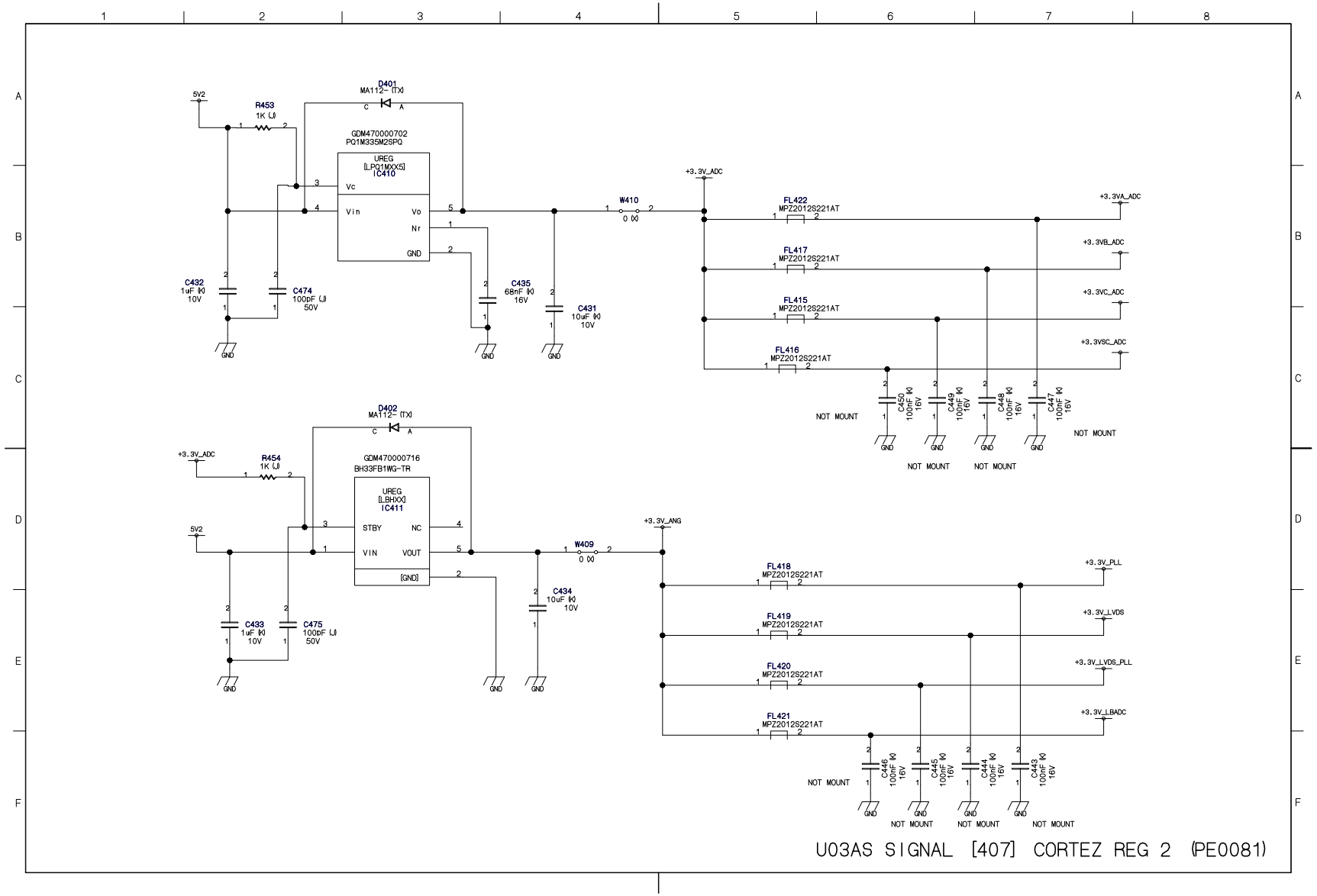
U03AS SIGNAL [403] CORTEZ REG 3 (PE0081)



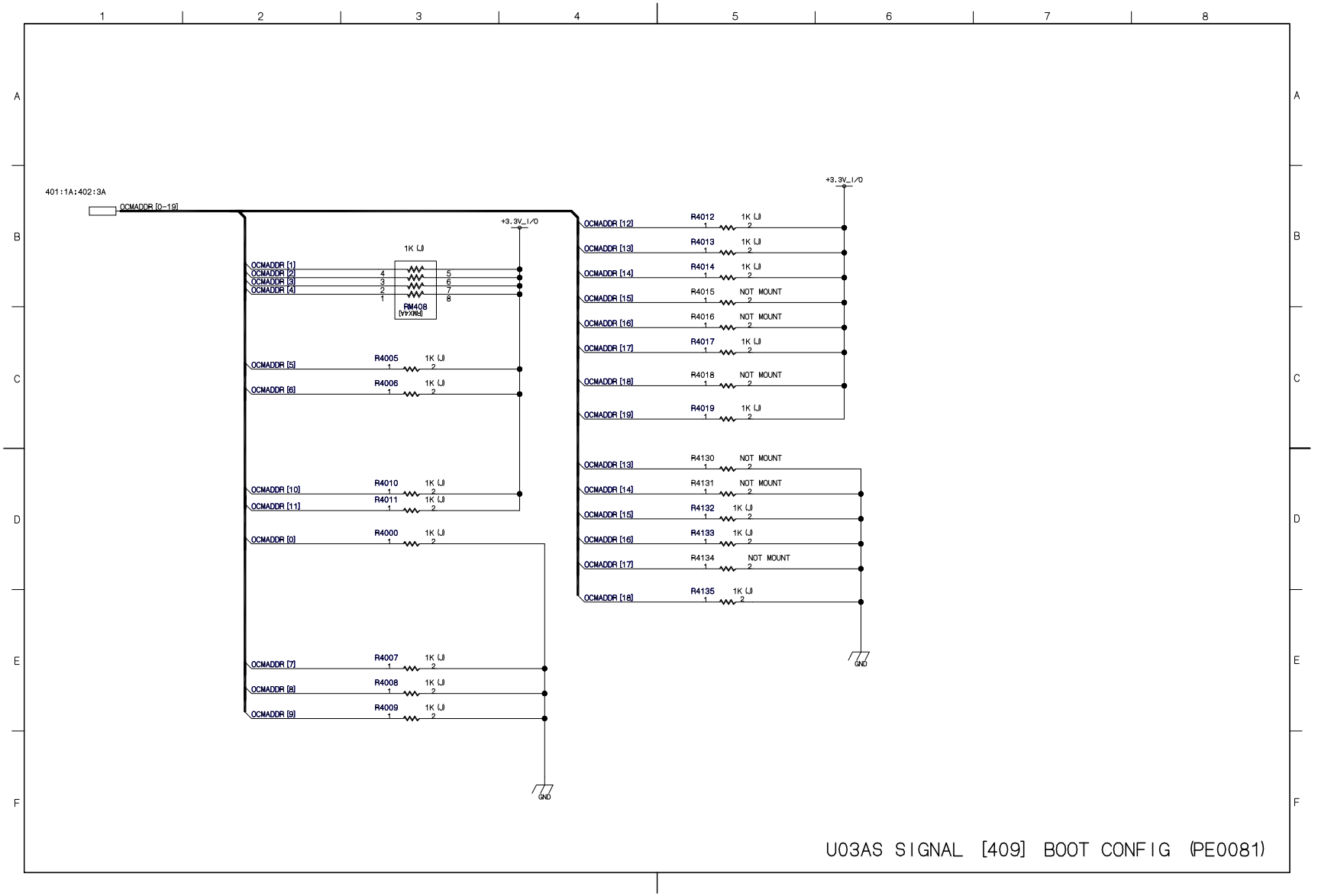
U03AS SIGNAL [404] E2P ROM OTHER (PE0081)



U03AS SIGNAL [406] CORTEZ REG 1 (PE0081)

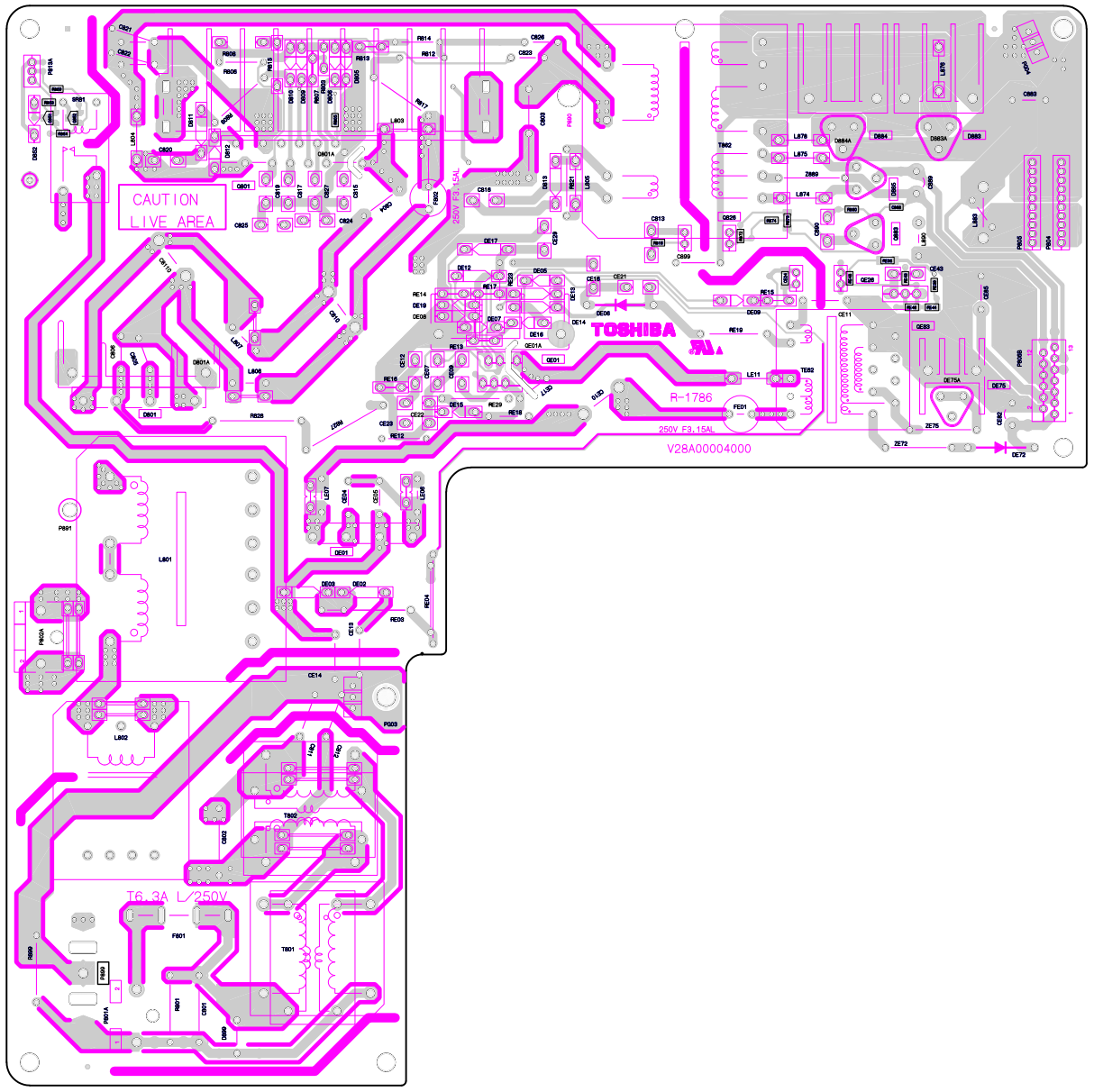


U03AS SIGNAL [407] CORTEZ REG 2 (PE0081)

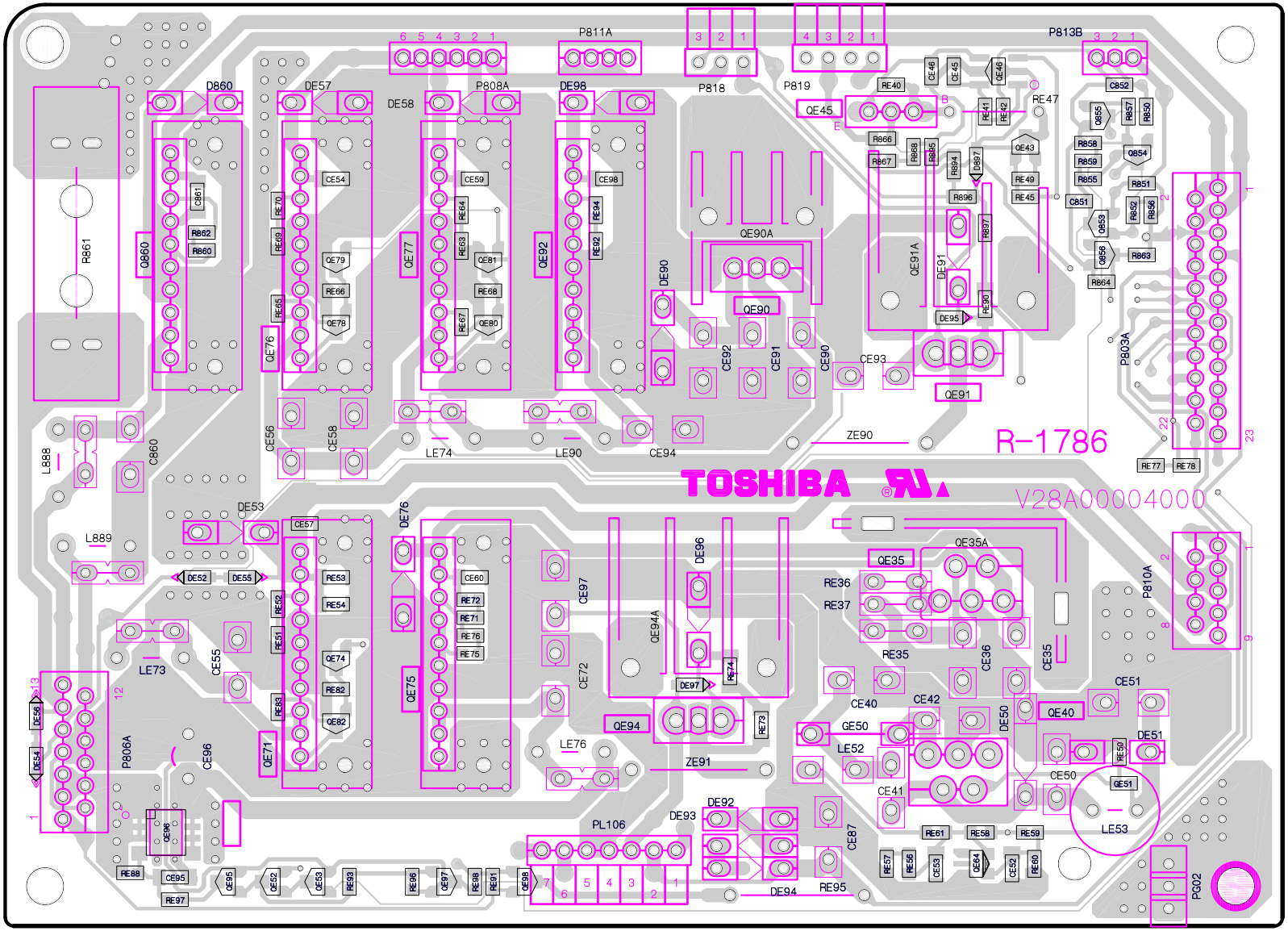


U03AS SIGNAL [409] BOOT CONFIG (PE0081)

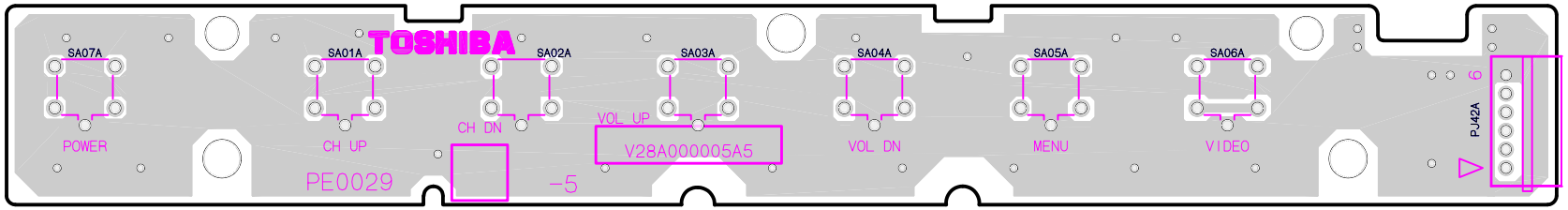
U01A POWER [Bottom] (PE0028)



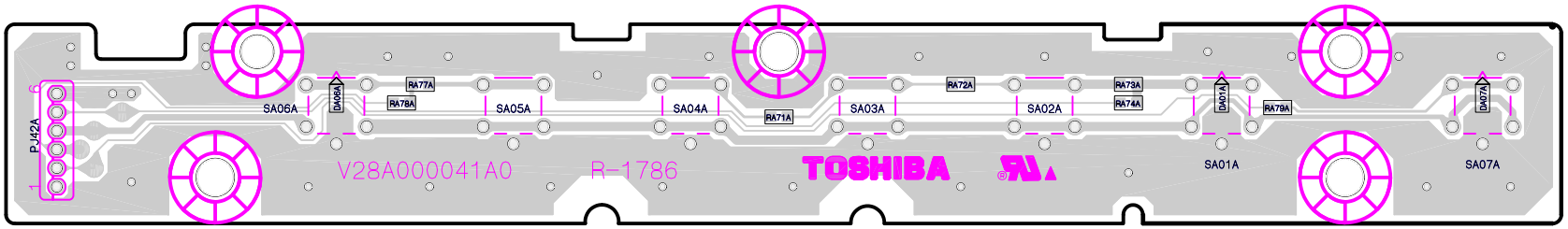
U01B LOW B [Bottom] (PE0028)



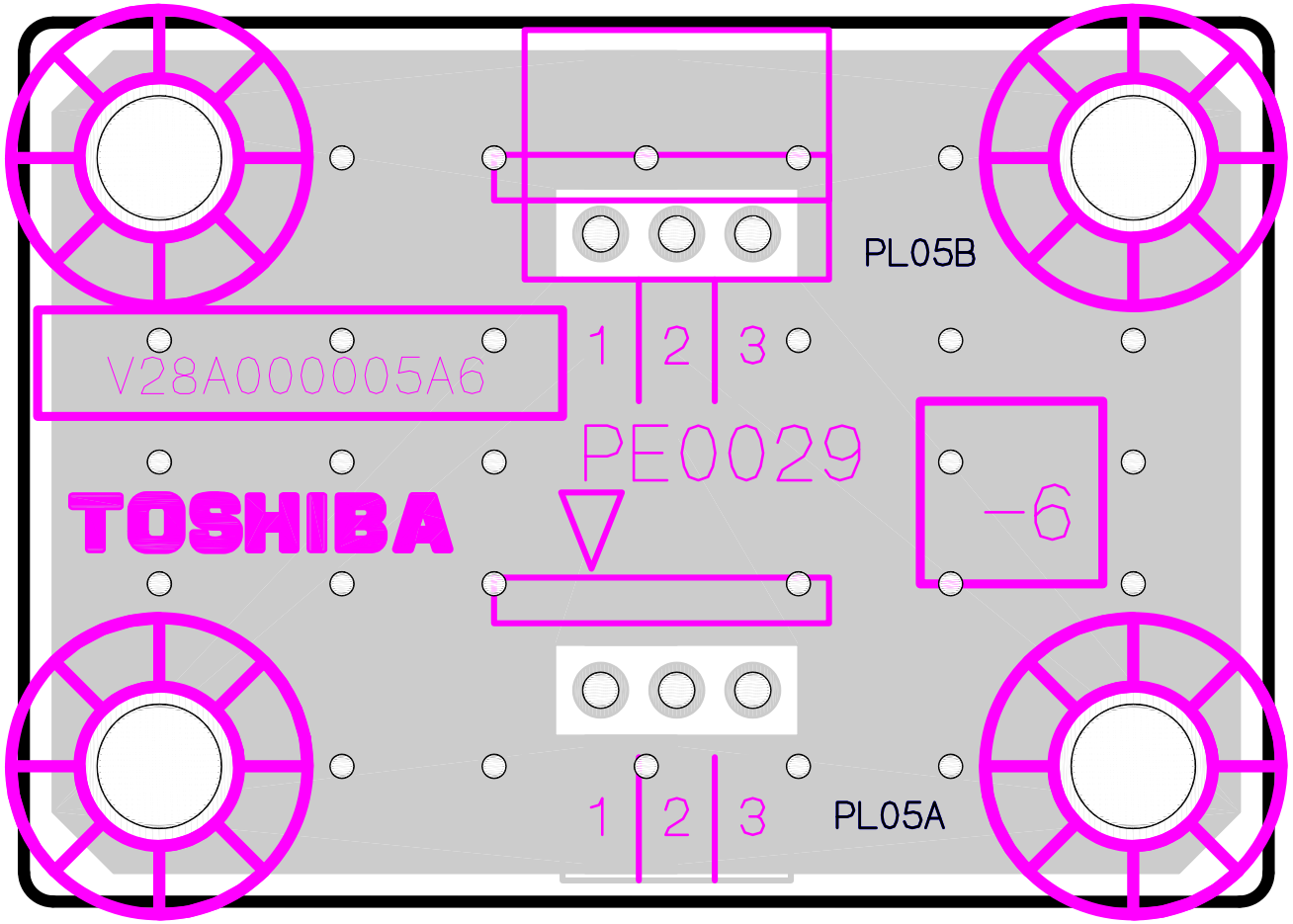
U02E 7-KEY [Top] (PE0029)



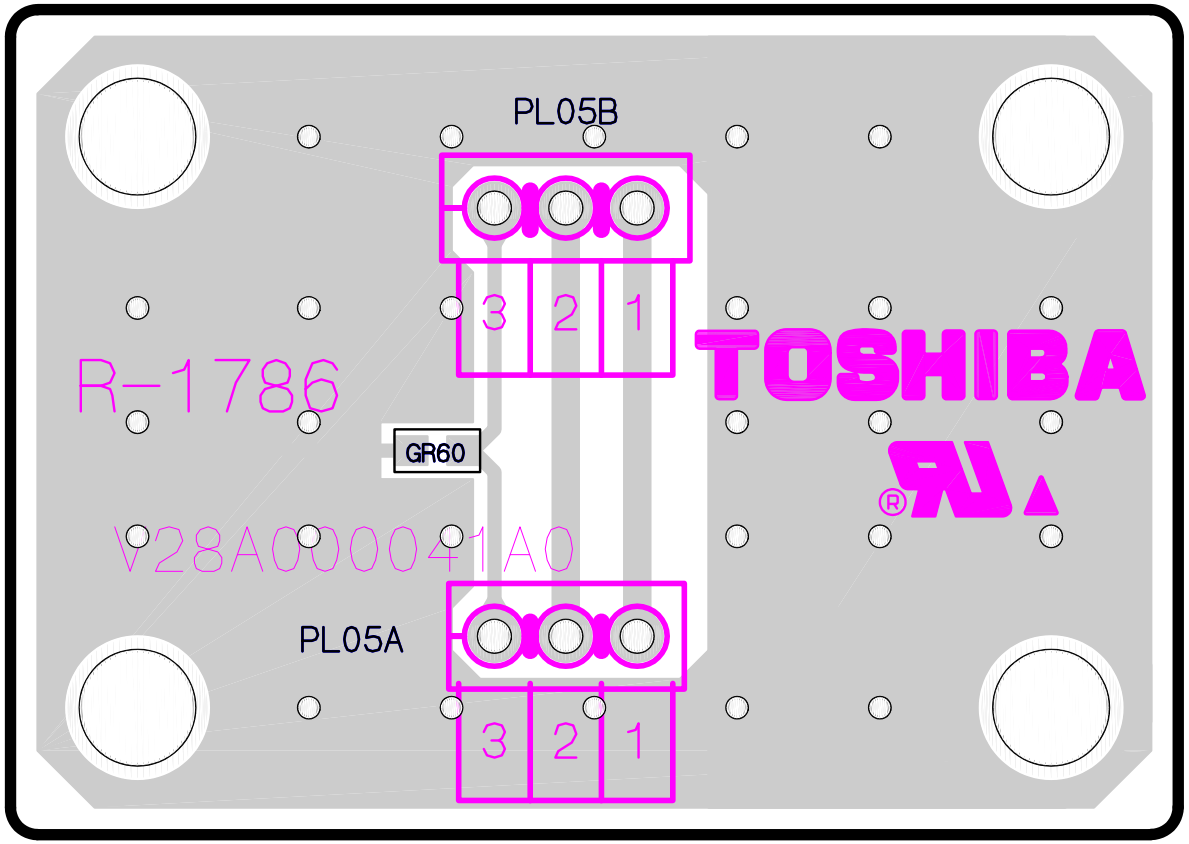
U02E 7-KEY [Bottom] (PE0029)



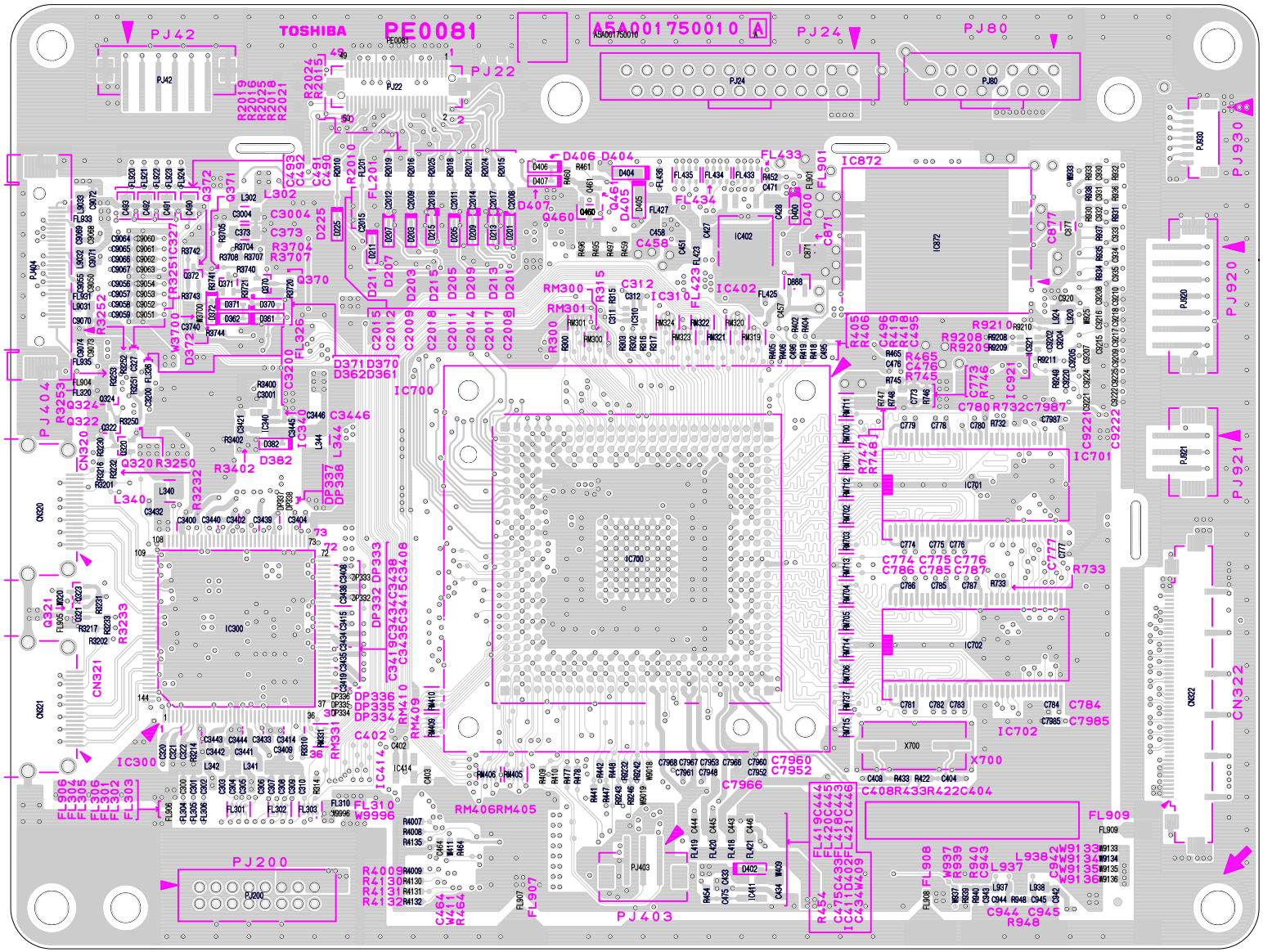
U02F DB_DOWNLOAD [Top] (PE0029)



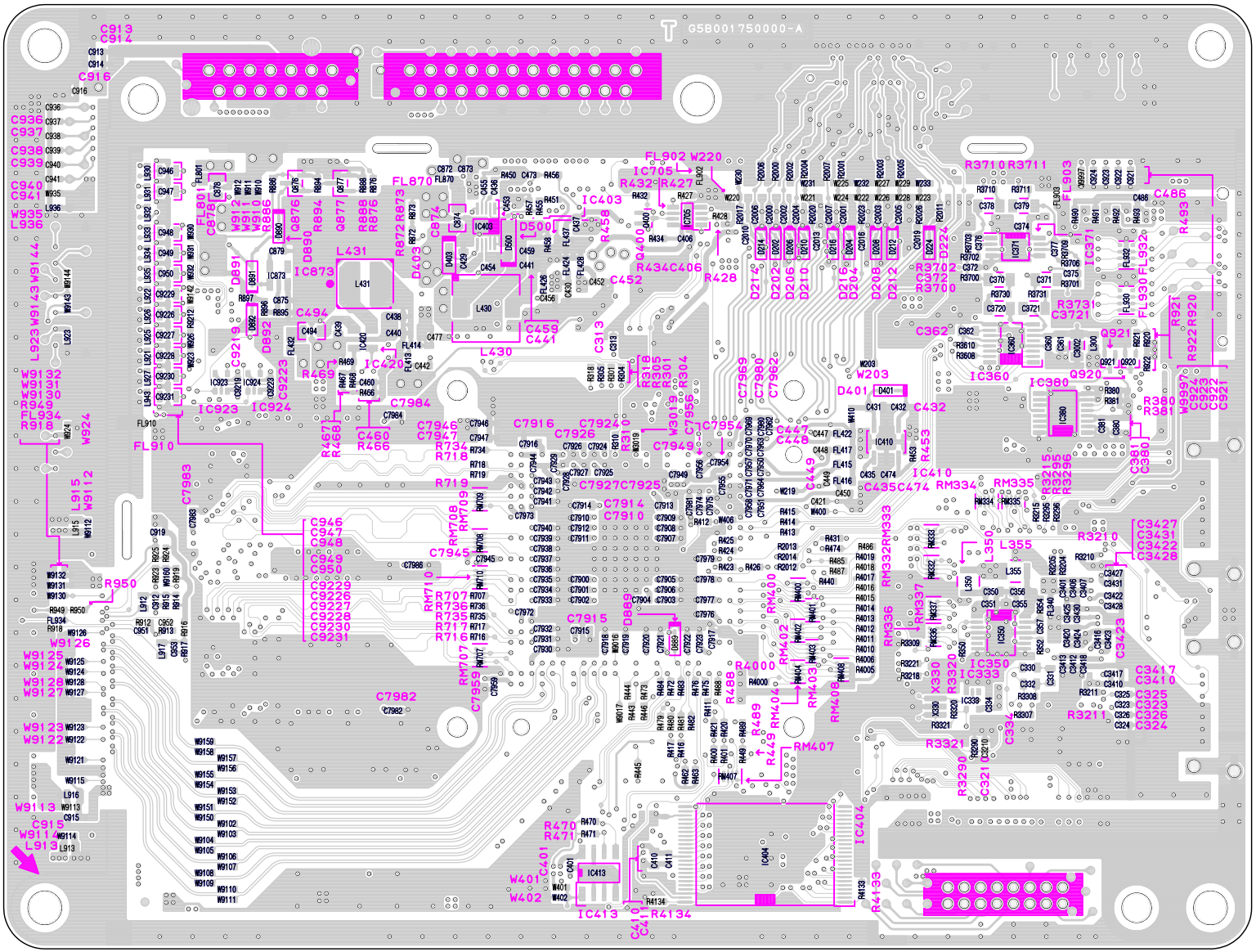
U02F DB_DOWNLOAD [Bottom] (PE0029)



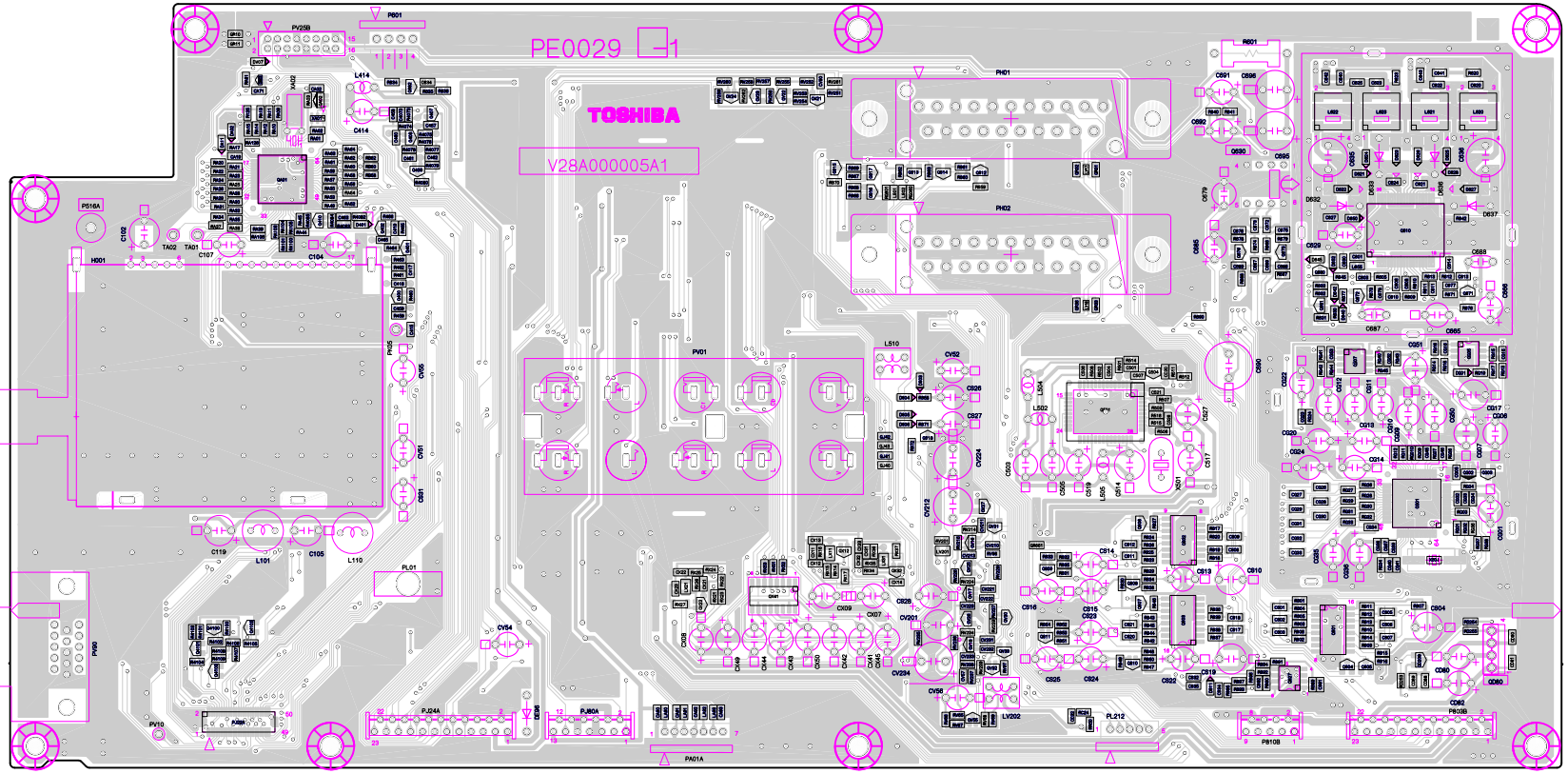
U03AS SIGNAL [Top] (PE0081)



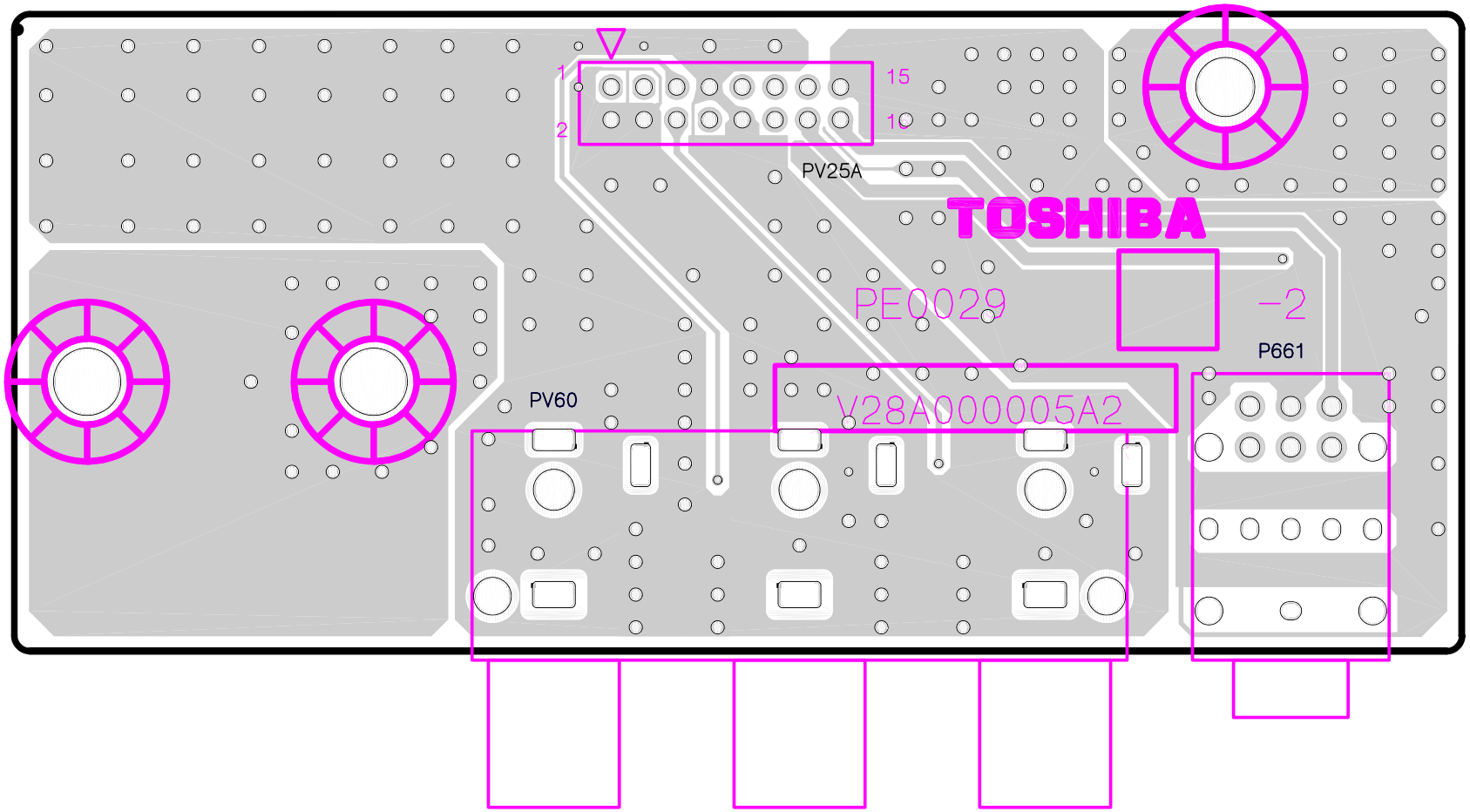
U03AS SIGNAL [Bottom] (PE0081)



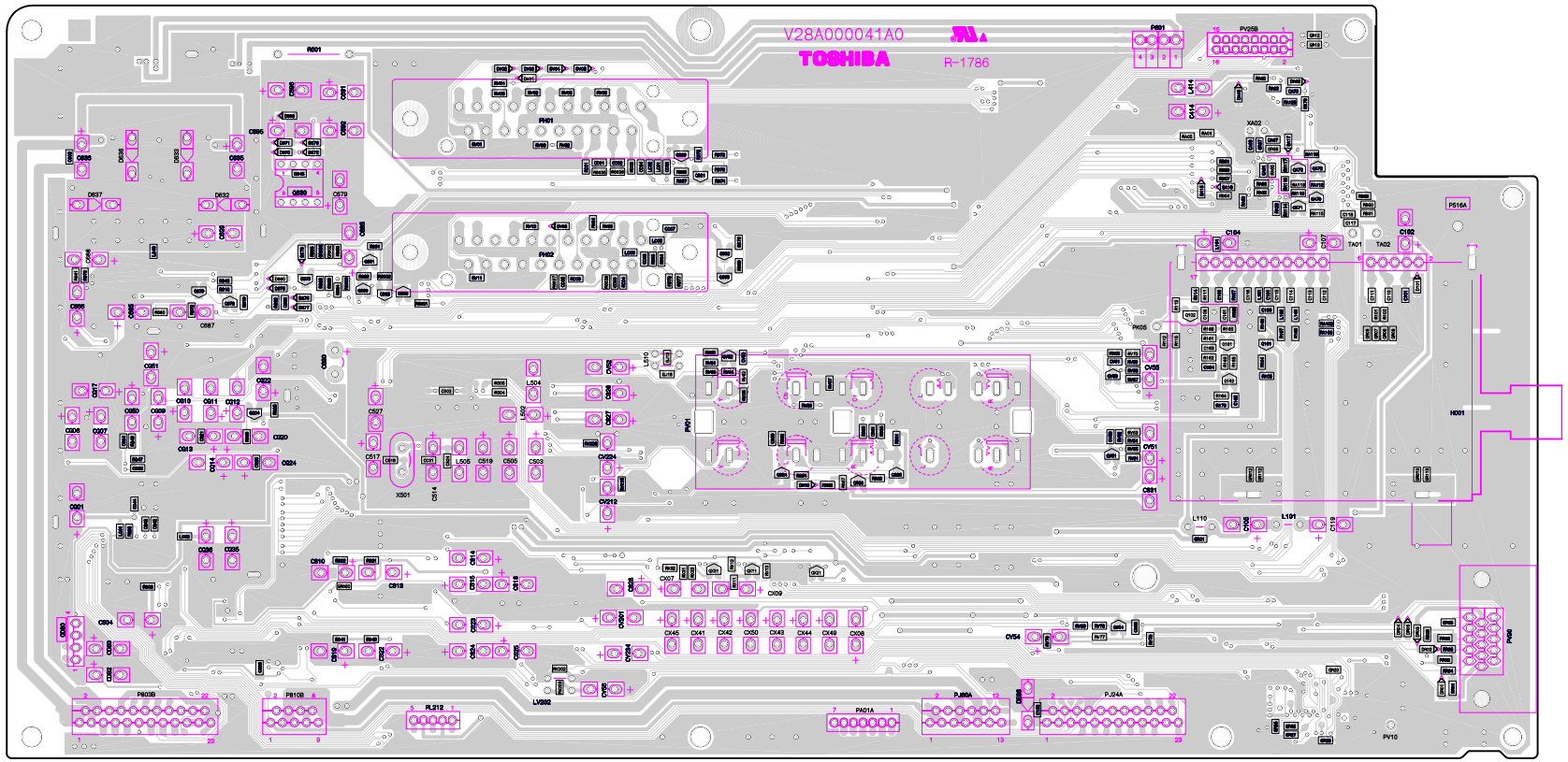
U02A AV TERMINAL [Top] (PE0029)



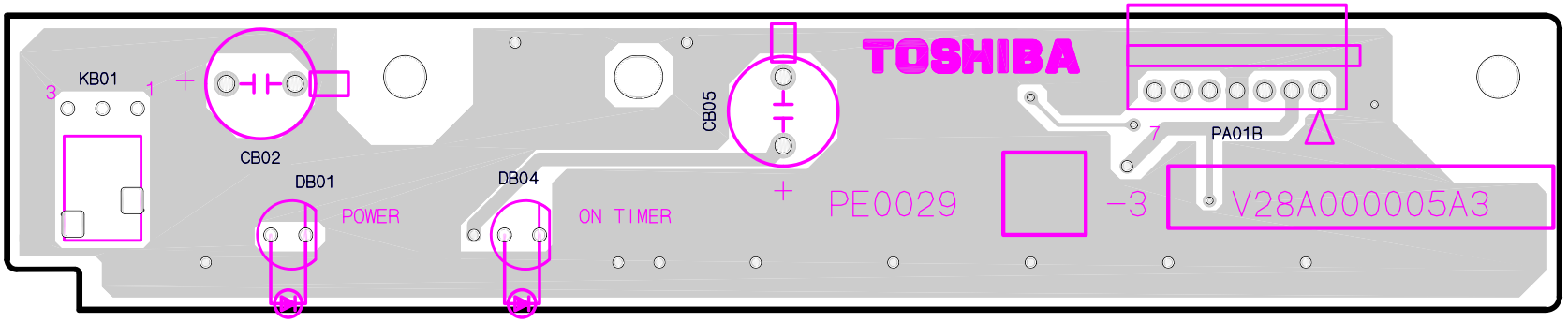
U02B FRONT AV [Top] (PE0029)



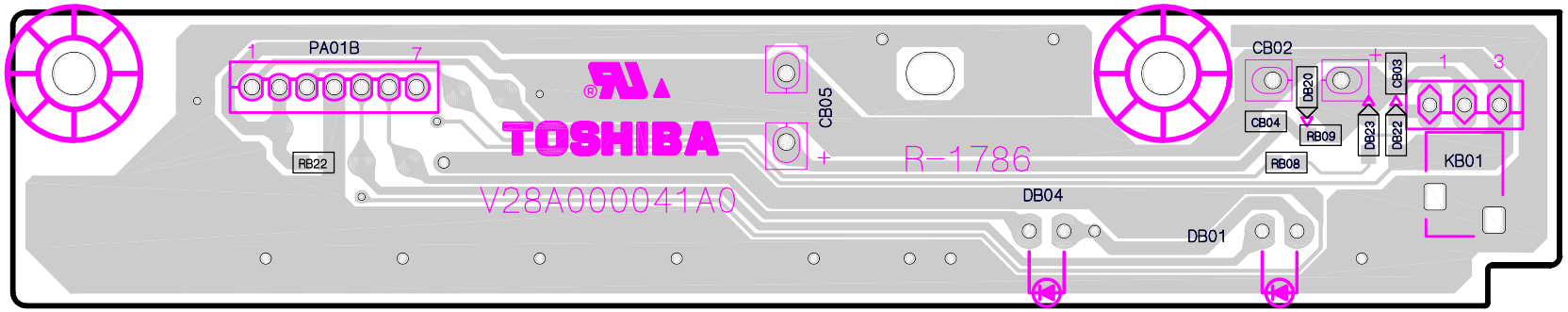
U02A AV TERMINAL [Bottom] (PE0029)



U02C LED [Top] (PE0029)



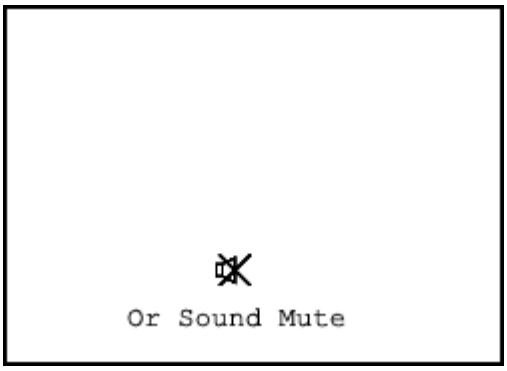
U02C LED [Bottom] (PE0029)



ADJUSTMENT

Service Mode

Entering to Service Mode



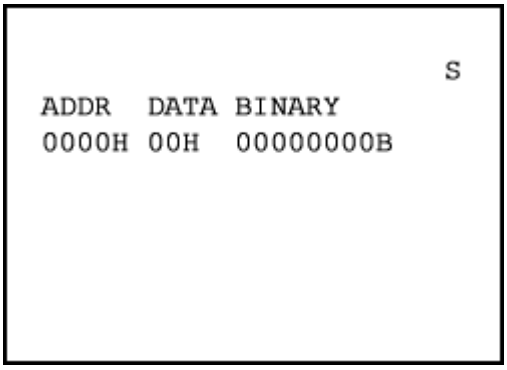
1. Set VOLUME to minimum and press button once on remote control.

↓

2. Press button again and hold button down.

↓

Service Mode display

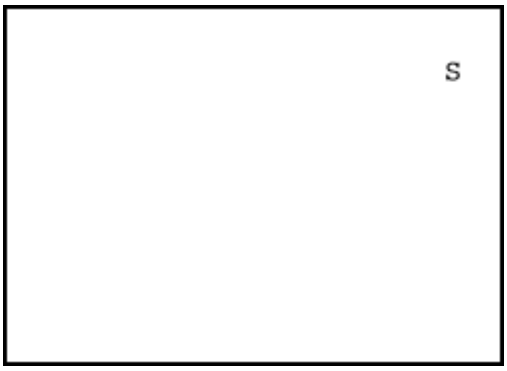


3. While holding the button, press MENU button on TV set.

Displaying the Adjustment Menu

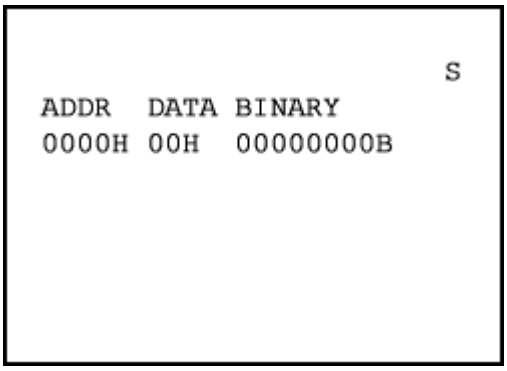
Press MENU button on TV.

Service Mode



Press ↑ ↓ Press

Adjustment Mode



Key Function in the Service Mode

The following key entry during display of adjustment menu provides special functions.

CAUTION: Never try to perform initialization unless you have changed the memory IC.

	button (on remote control)

Test signal selection	
Selection of the adjustment items	CH ▲/▼ (on TV or remote control)
Change of the data value	Volume ◿ +/- (on TV or remote control)
Adjustment menu mode ON/OFF	MENU button (on TV)
Initialization of the memory (QA02)	CALL + CH button on TV (▲)
Reset the count of operating protect circuit to "00"	CALL + CH button on TV (▼)
"RCUT" selection	1 button
"GCUT" selection	2 button
"BCUT" selection	3 button
"CNTX" selection	4 button
"COLC" selection	5 button
"UVTT" selection	6 button
Automatic A/D Adjustment (PC, Component, Composite (PAL, NTSC))	7 button
Self diagnostic display ON/OFF	9 button

Selecting the Adjusting Items

Every pressing of CH ▲ button in the service mode changes the adjustment items in the order of table below. (▼ button for reverse order)

SETTING & ADJUSTING DATA

[SERVICE MODE]

ADJUSTING ITEMS AND DATA IN THE SERVICE MODE:

Note:

The image system data of RCUT-BDRV is different by each image format.
The PAL value is indicated in the table.
Never adjust H.POS and V.POS except PAL/WIDE mode.

Item	Name of adjustment	Preset	Data
RCUT	R CUT OFF	00H	←
GCUT	G CUT OFF	00H	←
BCUT	B CUT OFF	00H	←
RDRV	R DRIVE	7EH	←
GDRV	G DRIVE	80H	←
BDRV	B DRIVE	88H	←
BRTC	BRIGHTNESS CENTER	03H	←
COLC	COLOR CENTER	A8H	←
UVTT	BASE BAND TINT	04H	←
CNTX	CONTRAST MAX	86H	←
VOLUX	MAX VOLUME LIMITED	7FH	←
PLLW0	PLL WAIT TIME	14H	←
PLLW1	PLL WAIT TIME	03H	←
PLLW2	PLL WAIT TIME	0FH	←
PLLW3	PLL WAIT TIME	05H	←
PLLW4	PLL WAIT TIME	14H	←
PLLW5	PLL WAIT TIME	04H	←
OPT2	TV SET OPTION 2 (HOTEL MODE)	00H	←

Adjusting the Data

Pressing of VOLUME +/- button will change the value of data in the range from 00H to FFH. The variable range depends on the adjusting item.

Exit from Service Mode

Pressing POWER button to turn off the TV once.

Initialization of Memory Data of QA02

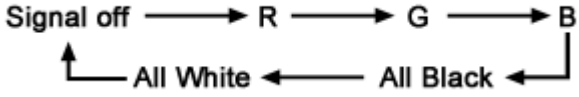
After replacing QA02, the following initialization is required.

CAUTION: Never attempt to initialize the data unless QA02 has been replaced.

1. Enter the service mode, then select any register item.
2. Press and hold the CALL button on the remote control, then press the CH ▲ button on the TV.
   The initialization of QA02 has been completed.
3. Check the picture carefully. If necessary, adjust any adjustment item above.
   Perform "Auto tune" on the owner's manual.

Test Signal Selection

Every pressing of ⊕ button on the remote control changes the built-in test patterns on screen as described below in Service Mode.

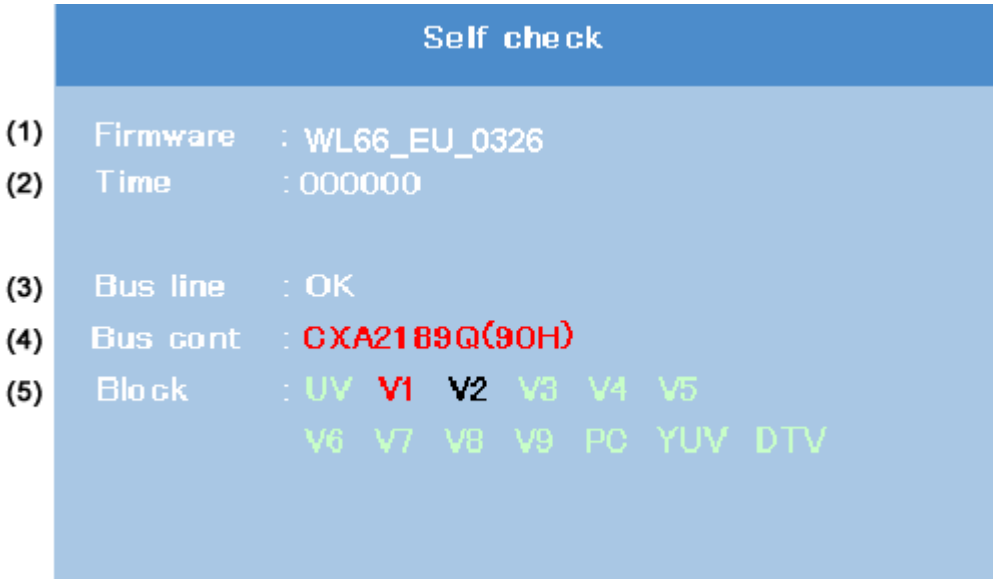


Picture	Signal
	Red raster
	Green raster
	Blue raster

	All Black
	All White

Self Diagnostic Function

1. Press "9" button on remote control during display of adjustment menu in the service mode. The diagnosis will begin to check if interface among IC's is executed properly.
2. During diagnosis, the following displays are shown.


Self check
(1) Firmware : WL66_EU_0326
(2) Time : 000000
(3) Bus line : OK
(4) Bus cont : CXA2189Q(90H)
(5) Block : UV V1 V2 V3 V4 V5
V6 V7 V8 V9 PC YUV DTV

(1) Firmware :
Version information of microprocessor
In case of file name : WL66_EU and Version : 0326 indicates [WL66_EU_0326].

(2) Time : Total hour of turn the TV on. (Unit : H)

(3) Bus line : -- "OK" is normal
SCL-GND (Red indication) : SCL-GND short circuit

SDA-GND (Red indication) : SDA-GND short circuit
SCL-SDA (Red indication) : SCL-SDA short circuit

(4) Bus cont : --- "OK" is normal.
NG is abnormal (Red indication).
When the abnormal status is detected, type name of semiconductor is indicated in in red colour.

(5) Block
UV : TV reception mode
V1 - V9 : VIDEO 1-9 input mode
PC : PC mode
YUV : YUV mode
DTV : DTV mode

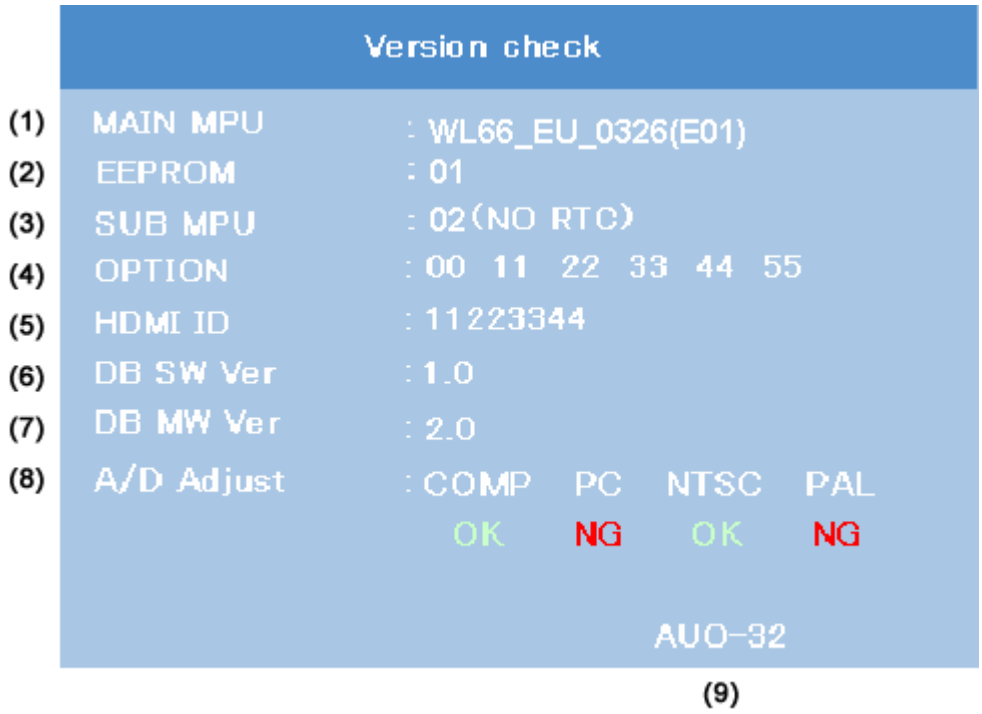
	WL66Ps/WL66Zs/WLT66s/WLG66s
UV	RF
V1	1 (SCART (FULL))
V2	2 (SCART (S+AV))
V3	3 (Composite/Component)
V4	HDMI1
V5	HDMI2
V6	--
V7	--
V8	--
V9	--
PC	PC
YUV	--
DTV	--

Version Check Mode

1. Press "9" button twice on remote control during display of adjustment menu in the service mode.

The version of main MPU will be checked.

2. During Version Check, the following displays are shown.


Version check
(1) MAIN MPU : WL66_EU_0326(E01)
(2) EEPROM : 01
(3) SUB MPU : 02(NO RTC)
(4) OPTION : 00 11 22 33 44 55
(5) HDMI ID : 11223344
(6) DB SW Ver : 1.0
(7) DB MW Ver : 2.0
(8) A/D Adjust : COMP PC NTSC PAL
OK NG OK NG
AUO-32
(9)

(1) MAIN MPU :

Version information of microprocessor

In case of file name : WL66_EU, Version 0326 for Code Program Version and (E01) for OSD Version indicates [WL66_EU_0326 (E01)]

(2) EEPROM :

Version information of EEPROM : Display 1 byte data.

(3) SUB MPU :

Version information of SUB MPU : Display 1 byte data.

(4) OPTION :

Option information : Display six numbers of 1 byte data.

(5) HDMI ID :

HDMI ID information : Display 4 byte data.

(6) SW Ver

Version information of DB software. (Only digital model.)

(7) MW Ver

Version information of DB software middleware. (Only digital model)

(8) A/D Adjust

A/D adjustment item.

--COMP : Component input

--PC : PC input

--PAL : PAL (50 Hz) SD signal (composite input)

--NTSC : NTSC (60 Hz) SD signal (composite input)

--OK : A/D adjustment set correctly.

--NG : A/D adjustment set incorrect.

(9) LCD Panel Vender information display

The following Panel Vender and screen size are displayed.

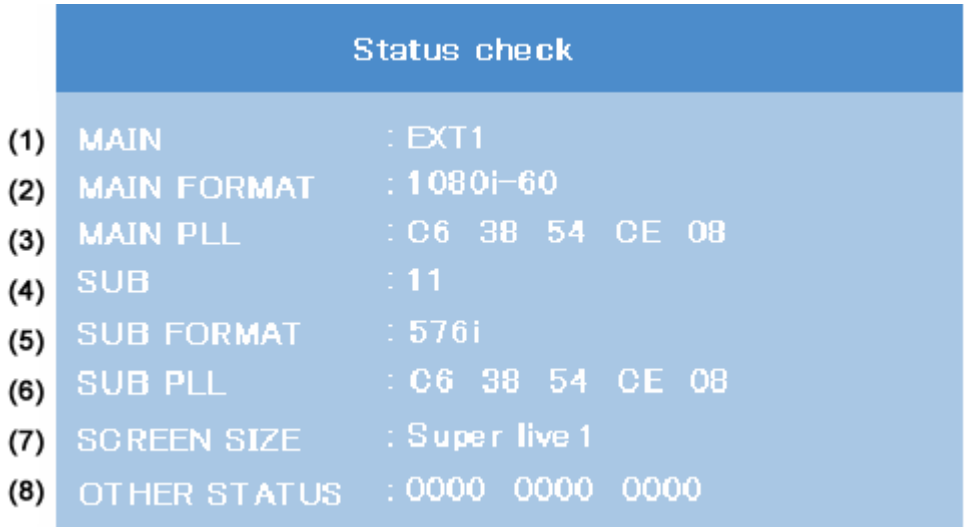
Panel Vender	Screen Size (Inch)
LPL	-26
SHP	-32
CMO	-37
AUO	-42 -47

Example : AUO-32 indicates that Vender is AUO and Screen Size is 32 inch.

Status Check Mode

1. Press "9" button thrice on remote control during display of adjustment menu in the service mode.
   The status of this model will be checked.

2. During Status Check, the following displays are shown.


Status check
(1) MAIN : EXT1
(2) MAIN FORMAT : 1080i-60
(3) MAIN PLL : C6 38 54 CE 08
(4) SUB : 11
(5) SUB FORMAT : 576i
(6) SUB PLL : C6 38 54 CE 08
(7) SCREEN SIZE : Super live 1
(8) OTHER STATUS : 0000 0000 0000

(1) MAIN :

Main source information :

Display RF position number (0 - 99) on the main screen, or Input Source (EXT1/2/3/HDMI etc.)

(2) MAIN FORMAT :

Display Video and PC format information

(3) MAIN PLL :

Main PLL information : Display 1 byte data at five.

(4) SUB :

Sub source information :

Display RF position number (0 - 99) on the Sub screen, or Input Source (EXT1/2/3/HDMI etc.)

This item displays only Double window model.

(5) SUB FORMAT :

Display Video and PC format information

This item displays only Double window model.

(6) SUB PLL :

Sub PLL information : Display 1 byte data at five.

This item displays only Double window model.

(7) SCREEN SIZE :

Display the screen size as follows.

Exact Scan
Wide

Super Live 2
Cinema 2
4:3
Super Live 1
Cinema 1
Subtitle
14:9

(8) OTHER STATUS :

Other status information : Display three numbers of 2 byte data.

Setting Hotel Mode

Enter to service mode and select Hotel Mode menu by pressing P▲ or P▼.
After selecting Hotel Mode, press ◿ + to enter details setting in Hotel Mode.

To select menu, press P▲ or P▼ and press OK to enter the adjustment menu of OPT2.
To move the cursor in the adjustment, press ◿ + or ◿ -.

1. By pressing P▲ or P▼, OPT2 setting will change the value either 1 or 0 on selected items as follows;

OPT2	FUNCTION DESCRIPTION	1	0 (Normal)
D7 (bit7)	POS1 stored program will appear in forced when turn ON the main power	POS1 in forced	Disable
D6 (bit6)	VIDEO1 stored program will appear in forced when turn ON the main power	VIDEO1 in forced	Disable
D5 (bit5)	FRONT Key	Disable	Enable
D4 (bit4)	Front keys except input selector key (Video/TV)	Disable	Enable
D3 (bit3)	User remote control operation	Disable (Service mode and Super User mode may possible to setting only)	Enable
D2 (bit2)	Language display except SETUP MENU language	Disable Display the language only	Enable

	(tuning adjustment etc.)		
D1 (bit1)	SETUP MENU	Disable	Enable
D0 (bit0)	HOTEL Mode	On (Enable the setting of D1 to D7)	Off (Normal)

LED Indications

The Green and Red LEDs on the TV (at the bottom center of the TV) indicate the TV's status, as described below.

- Red ON (solid) and Green OFF = The TV power cord is plugged in.
- Green ON (solid) and Red ON = The On timer is operating.

	LED Indication	Condition	Solution
1	Green is OFF; Red blinks continuously at 0.5-second intervals.	Abnormal operation	Turn OFF the TV and unplug the power cord. Plug the power cord in again and turn ON the TV.
2	Green is OFF; Red blinks continuously at 1-second intervals.	Abnormal operation of BUS line.	Turn OFF the TV and unplug the power cord. Plug the power cord in again and turn ON the TV.

PARTS LIST

Precaution

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION" FOR DIRECT VIEW CTV ONLY, "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" OF THIS MANUAL.

CAUTION: The international hazard symbols "⚠" in the schematic diagram and the parts list designate components which have special characteristics important for safety and
should be replaced only with types identical to those in the original circuit or specified in the parts list.

The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the SAFETY PRECAUTION and PRODUCT SAFETY NOTICE.

Do not degrade the safety of the receiver through improper servicing.

Note:

- The part number must be used when ordering parts, in order to assist in processing, be sure to include the Model number and Description.
- The PC board assembly with ✱ mark is no longer available after the end of the production.

Abbreviations

Capacitors	CD	:	Ceramic Disk
Resistors	CF	:	Carbon film
	OMF	:	Oxide Metal Film
	PF	:	Plastic Film
	CC	:	Carbon Composition
	VR	:	Variable Resistor

EL : Electrolytic
MF : Metal Film
FR : Fusible Resistor

All CD and PF capacitors are ±5 %, 50 V and all resistor, ±5 %, 1/6 W unless otherwise noted.

U02C LED (PE0029)

	Location	Parts No.	Description
*	U02C	75002062	PC BOARD ASSY, PE0029A3, LED
	CB02	76202221	CAPACITOR, ELECTROLYTIC, 10V 220UF M
	CB03	76100104	CAPACITOR, CERAMIC CHIP, 25V F 0.1UF Z
	CB04	76100104	CAPACITOR, CERAMIC CHIP, 25V F 0.1UF Z
	CB05	76202221	CAPACITOR, ELECTROLYTIC, 10V 220UF M
	DB01	23358606	DIODE, LED, SLR-56VC3FPQ
	DB04	23358605	DIODE, LED, SLR-56MC3FPQR
	DB20	23357406	DIODE, ZENER, UDZS5.6B
	DB22	23357703	DIODE, 1SS355
	DB23	23357703	DIODE, 1SS355
	KB01	75002236	IC, GP1UE261RKVF
	PA01B	23713949	CONNECTOR, S7B-PH-K-S(LF)
	RB08	76011470	RESISTOR, CHIP, 1/20W 47 OHM J
	RB09	76011470	RESISTOR, CHIP, 1/20W 47 OHM J

U02E 7-KEY (PE0029)

	Location	Parts No.	Description
*	U02E	75002064	PC BOARD ASSY, PE0029A5, 7-KEY
	DA01A	23362042	DIODE, ZENER, UDZS6.8B
	DA06A	23362042	DIODE, ZENER, UDZS6.8B
	DA07A	23362042	DIODE, ZENER, UDZS6.8B
	PJ42A	23713948	CONNECTOR, S6B-PH-K-S(LF)
	RA71A	76011683	RESISTOR, CHIP, 1/20W 68K OHM J
	RA72A	76011223	RESISTOR, CHIP, 1/20W 22K OHM J
	RA73A	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	RA74A	76000445	CHIP JUMPER, 1608TYPE
	RA77A	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	RA78A	76000445	CHIP JUMPER, 1608TYPE
	RA79A	76000445	CHIP JUMPER, 1608TYPE
	SA01A	23344505	SWITCH, PUSH 1C1P
	SA02A	23344505	SWITCH, PUSH 1C1P
	SA03A	23344505	SWITCH, PUSH 1C1P
	SA04A	23344505	SWITCH, PUSH 1C1P
	SA05A	23344505	SWITCH, PUSH 1C1P
	SA06A	23344505	SWITCH, PUSH 1C1P
	SA07A	23344505	SWITCH, PUSH 1C1P

U02F DB_DOWNLOAD (PE0029)

	Location	Parts No.	Description
*	U02F	75002065	PC BOARD ASSY, PE0029A6, DB_DOWNLOAD
	GR60	76000445	CHIP JUMPER, 1608TYPE
	PL05A	23713754	PLUG, 3P 2.5MM G, B3B-EH-F1-TV4
	PL05B	23713776	PLUG, 3P 2.5MM W, S3B-EH

Loading ...

	Location	Parts No.	Description
*	U03AS	75003796	PC BOARD ASSY, PE0081C1, SIGNAL
	C301	V01GD0000896	CHIP RESISTOR (1608)
	C302	V01GD0000896	CHIP RESISTOR (1608)
	C303	V01GD0000896	CHIP RESISTOR (1608)
	C304	V01GD0000896	CHIP RESISTOR (1608)
	C305	V01GD0000896	CHIP RESISTOR (1608)
	C306	V01GD0000896	CHIP RESISTOR (1608)
	C307	V01GD0000896	CHIP RESISTOR (1608)
	C308	V01GD0000896	CHIP RESISTOR (1608)
	C309	V01GD0000896	CHIP RESISTOR (1608)
	C310	V01GD0000896	CHIP RESISTOR (1608)
	C311	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C312	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C313	V03GD0000559	CHIP CERAMIC CAPACITOR (1608)
	C320	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C321	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C322	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C323	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C324	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C325	V03GD0000538	CHIP CERAMIC CAPACITOR (1608)
	C326	V03GD0000538	CHIP CERAMIC CAPACITOR (1608)
	C327	V03GD0000719	CHIP CERAMIC CAPACITOR (1608)
	C330	V03GD0001318	CHIP CERAMIC CAPACITOR (2012)
	C331	V03GD0001318	CHIP CERAMIC CAPACITOR (2012)
	C332	V03GD0000643	CHIP CERAMIC CAPACITOR (2012)
	C334	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C350	V03GD0001318	CHIP CERAMIC CAPACITOR (2012)
	C351	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C355	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C356	V03GD0001318	CHIP CERAMIC CAPACITOR (2012)
	C357	V03GD0000714	CHIP CERAMIC CAPACITOR (1608)
	C360	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C361	V03GD0001318	CHIP CERAMIC CAPACITOR (2012)
	C362	V03GD0001318	CHIP CERAMIC CAPACITOR (2012)
	C370	V03GD0000741	CHIP CERAMIC CAPACITOR (3216)
	C371	V03GD0000741	CHIP CERAMIC CAPACITOR (3216)
	C372	V03GD0000578	CHIP CERAMIC CAPACITOR (1608)
	C373	V03GD0000741	CHIP CERAMIC CAPACITOR (3216)
	C374	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)

	C375	V03GD0000578	CHIP CERAMIC CAPACITOR (1608)
	C376	V03GD0000541	CHIP CERAMIC CAPACITOR (1608)
	C377	V03GD0000541	CHIP CERAMIC CAPACITOR (1608)
	C378	V03GD0000741	CHIP CERAMIC CAPACITOR (3216)
	C379	V03GD0000741	CHIP CERAMIC CAPACITOR (3216)
	C380	V03GD0001318	CHIP CERAMIC CAPACITOR (2012)
	C381	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C401	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C404	V03GD0000708	CHIP CERAMIC CAPACITOR (1608)
	C406	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C408	V03GD0000708	CHIP CERAMIC CAPACITOR (1608)
	C410	V03GD0001318	CHIP CERAMIC CAPACITOR (2012)
	C411	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C427	V03GD0001318	CHIP CERAMIC CAPACITOR (2012)
	C428	V03GD0001144	CHIP CERAMIC CAPACITOR (1608)
	C429	V03GD0001318	CHIP CERAMIC CAPACITOR (2012)
	C431	V03GD0001318	CHIP CERAMIC CAPACITOR (2012)
	C432	V03GD0001144	CHIP CERAMIC CAPACITOR (1608)
	C433	V03GD0001144	CHIP CERAMIC CAPACITOR (1608)
	C434	V03GD0001318	CHIP CERAMIC CAPACITOR (2012)
	C435	V03GD0000591	CHIP CERAMIC CAPACITOR (1608)
	C436	V03GD0000574	CHIP CERAMIC CAPACITOR (1608)
	C437	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C438	V03GD0001318	CHIP CERAMIC CAPACITOR (2012)
	C439	V03GD0001318	CHIP CERAMIC CAPACITOR (2012)
	C440	V03GD0001318	CHIP CERAMIC CAPACITOR (2012)
	C441	V03GD0001131	CHIP CERAMIC CAPACITOR (2012)
	C451	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C453	V03GD0000574	CHIP CERAMIC CAPACITOR (1608)
	C454	V03GD0000538	CHIP CERAMIC CAPACITOR (1608)
	C455	V03GD0000538	CHIP CERAMIC CAPACITOR (1608)
	C458	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C459	V03GD0001131	CHIP CERAMIC CAPACITOR (2012)
	C460	V03GD0000543	CHIP CERAMIC CAPACITOR (1608)
	C471	V03GD0000546	CHIP CERAMIC CAPACITOR (1608)
	C473	V03GD0001130	CHIP CERAMIC CAPACITOR (1608)
	C474	V03GD0001130	CHIP CERAMIC CAPACITOR (1608)
	C475	V03GD0001130	CHIP CERAMIC CAPACITOR (1608)
	C476	V03GD0000714	CHIP CERAMIC CAPACITOR (1608)
	C486	V03GD0000719	CHIP CERAMIC CAPACITOR (1608)
	C490	V03A000003Q0	CAPACITOR

	C491	V03A000003Q0	CAPACITOR
	C492	V03A000003Q0	CAPACITOR
	C493	V03A000003Q0	CAPACITOR
	C494	V03A000004Q0	CAPACITOR CHIP CERA 25V 104S 3
	C495	V03GD0000585	CHIP CERAMIC CAPACITOR (1608)
	C496	V03GD0000585	CHIP CERAMIC CAPACITOR (1608)
	C773	V03GD0001131	CHIP CERAMIC CAPACITOR (2012)
	C774	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C775	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C776	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C777	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C778	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C779	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C780	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C781	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C782	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C783	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C784	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C785	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C786	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C787	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C872	V03GD0001138	CHIP CERAMIC CAPACITOR (1608)
	C873	V03GD0001138	CHIP CERAMIC CAPACITOR (1608)
	C874	V03A000003Q0	CAPACITOR
	C875	V03GD0001144	CHIP CERAMIC CAPACITOR (1608)
	C878	V03A000004Q0	CAPACITOR CHIP CERA 25V 104S 3
	C879	V03GD0000560	CHIP CERAMIC CAPACITOR (1608)
	C912	V03GD0001126	CHIP CERAMIC CAPACITOR (1608)
	C913	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C914	V03GD0000589	CHIP CERAMIC CAPACITOR (1608)
	C915	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C919	V03GD0000719	CHIP CERAMIC CAPACITOR (1608)
	C921	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C922	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C923	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C924	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C942	V03GD0001126	CHIP CERAMIC CAPACITOR (1608)
	C943	V03GD0001126	CHIP CERAMIC CAPACITOR (1608)
	C944	V03GD0001126	CHIP CERAMIC CAPACITOR (1608)
	C945	V03GD0001126	CHIP CERAMIC CAPACITOR (1608)
	C946	V03A000003Q0	CAPACITOR

	C947	V03A000003Q0	CAPACITOR
	C948	V03A000003Q0	CAPACITOR
	C949	V03A000003Q0	CAPACITOR
	C950	V03A000003Q0	CAPACITOR
	C951	V03GD0001192	CHIP CERAMIC CAPACITOR (1005)
	C953	V03GD0001126	CHIP CERAMIC CAPACITOR (1608)
	C2000	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C2001	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C2002	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C2003	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C2004	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C2005	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C2006	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C2007	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C2008	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C2009	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C2010	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C2011	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C2012	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C2013	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C2014	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C2015	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C2016	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C2017	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C2018	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C2019	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C3001	V03GD0001130	CHIP CERAMIC CAPACITOR (1608)
	C3002	V03GD0001320	CHIP CERAMIC CAPACITOR (3216)
	C3004	V03GD0001320	CHIP CERAMIC CAPACITOR (3216)
	C3200	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
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	C3401	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C3402	V03GD0000538	CHIP CERAMIC CAPACITOR (1608)
	C3404	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C3406	V03GD0000589	CHIP CERAMIC CAPACITOR (1608)
	C3407	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C3408	V03GD0000538	CHIP CERAMIC CAPACITOR (1608)
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	C3412	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C3413	V03GD0000589	CHIP CERAMIC CAPACITOR (1608)

	C3414	V03GD0000538	CHIP CERAMIC CAPACITOR (1608)
	C3415	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
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	C3417	V03GD0000589	CHIP CERAMIC CAPACITOR (1608)
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	C3419	V03GD0000538	CHIP CERAMIC CAPACITOR (1608)
	C3420	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C3421	V03GD0001318	CHIP CERAMIC CAPACITOR (2012)
	C3422	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C3423	V03GD0000589	CHIP CERAMIC CAPACITOR (1608)
	C3424	V03GD0000589	CHIP CERAMIC CAPACITOR (1608)
	C3425	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
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	C3428	V03GD0000589	CHIP CERAMIC CAPACITOR (1608)
	C3430	V03GD0000589	CHIP CERAMIC CAPACITOR (1608)
	C3431	V03GD0000589	CHIP CERAMIC CAPACITOR (1608)
	C3432	V03GD0001318	CHIP CERAMIC CAPACITOR (2012)
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	C3434	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
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	C3440	V03GD0000589	CHIP CERAMIC CAPACITOR (1608)
	C3441	V03GD0001318	CHIP CERAMIC CAPACITOR (2012)
	C3442	V03GD0001318	CHIP CERAMIC CAPACITOR (2012)
	C3443	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C3444	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C3445	V03GD0000719	CHIP CERAMIC CAPACITOR (1608)
	C3446	V03GD0000719	CHIP CERAMIC CAPACITOR (1608)
	C3720	V03GD0000741	CHIP CERAMIC CAPACITOR (3216)
	C3721	V03GD0000741	CHIP CERAMIC CAPACITOR (3216)
	C3740	V03GD0001318	CHIP CERAMIC CAPACITOR (2012)
	C7900	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7901	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7902	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
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	C7904	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
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	C7906	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
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	C7909	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7910	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7911	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7912	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7913	V03GD0001131	CHIP CERAMIC CAPACITOR (2012)
	C7914	V03GD0001131	CHIP CERAMIC CAPACITOR (2012)
	C7915	V03GD0001131	CHIP CERAMIC CAPACITOR (2012)
	C7916	V03GD0001131	CHIP CERAMIC CAPACITOR (2012)
	C7917	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7918	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7919	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7920	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7921	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7922	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7923	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7924	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7925	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7926	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7927	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7928	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
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	C7930	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7931	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
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	C7933	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7934	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7935	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
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	C7937	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7938	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
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	C7940	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7941	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7942	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7943	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7944	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7945	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7946	V03GD0001131	CHIP CERAMIC CAPACITOR (2012)
	C7947	V03GD0001131	CHIP CERAMIC CAPACITOR (2012)
	C7948	V03GD0000827	CHIP CERAMIC CAPACITOR (1608)
	C7949	V03GD0001131	CHIP CERAMIC CAPACITOR (2012)

	C7950	V03GD0000827	CHIP CERAMIC CAPACITOR (1608)
	C7951	V03GD0000827	CHIP CERAMIC CAPACITOR (1608)
	C7952	V03GD0000827	CHIP CERAMIC CAPACITOR (1608)
	C7953	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7954	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7955	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7956	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7957	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7958	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7959	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7960	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7961	V03GD0000827	CHIP CERAMIC CAPACITOR (1608)
	C7962	V03GD0000827	CHIP CERAMIC CAPACITOR (1608)
	C7963	V03GD0000827	CHIP CERAMIC CAPACITOR (1608)
	C7964	V03GD0000827	CHIP CERAMIC CAPACITOR (1608)
	C7966	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7967	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7968	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7969	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7970	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7971	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7972	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7973	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7974	V03GD0000827	CHIP CERAMIC CAPACITOR (1608)
	C7975	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7976	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7977	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7978	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7979	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7980	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7981	V03GD0000719	CHIP CERAMIC CAPACITOR (1608)
	C7982	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7983	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7984	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7985	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7986	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C7987	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C9055	V03GD0001126	CHIP CERAMIC CAPACITOR (1608)
	C9056	V03GD0001126	CHIP CERAMIC CAPACITOR (1608)
	C9057	V03GD0001126	CHIP CERAMIC CAPACITOR (1608)
	C9058	V03GD0001126	CHIP CERAMIC CAPACITOR (1608)

	C9059	V03GD0001126	CHIP CERAMIC CAPACITOR (1608)
	C9064	V03GD0001126	CHIP CERAMIC CAPACITOR (1608)
	C9065	V03GD0001126	CHIP CERAMIC CAPACITOR (1608)
	C9066	V03GD0001126	CHIP CERAMIC CAPACITOR (1608)
	C9067	V03GD0001126	CHIP CERAMIC CAPACITOR (1608)
	C9069	V03GD0001126	CHIP CERAMIC CAPACITOR (1608)
	C9070	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C9071	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C9072	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C9074	V03GD0001126	CHIP CERAMIC CAPACITOR (1608)
	C9202	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C9204	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C9205	V03GD0000827	CHIP CERAMIC CAPACITOR (1608)
	C9219	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C9220	V03GD0001128	CHIP CERAMIC CAPACITOR (1608)
	C9223	V03GD0000572	CHIP CERAMIC CAPACITOR (1608)
	C9226	V03A000003Q0	CAPACITOR
	C9227	V03A000003Q0	CAPACITOR
	C9228	V03A000003Q0	CAPACITOR
	C9229	V03A000003Q0	CAPACITOR
	C9230	V03A000003Q0	CAPACITOR
	C9231	V03A000003Q0	CAPACITOR
	CN320	75001875	CONNECTOR HDMI 1.0MM 19P
	CN321	75001875	CONNECTOR HDMI 1.0MM 19P
	CN322	V22GD0001650	0.5MM PITCH W TO B CONNECTOR
	D201	V42GD0000208	ZENER DIODE
	D202	V42GD0000208	ZENER DIODE
	D203	V42GD0000208	ZENER DIODE
	D204	V42GD0000208	ZENER DIODE
	D205	V42GD0000208	ZENER DIODE
	D206	V42GD0000208	ZENER DIODE
	D207	V42GD0000208	ZENER DIODE
	D208	V42GD0000208	ZENER DIODE
	D209	V42GD0000208	ZENER DIODE
	D210	V42GD0000208	ZENER DIODE
	D211	V42GD0000208	ZENER DIODE
	D212	V42GD0000208	ZENER DIODE
	D213	V42GD0000208	ZENER DIODE
	D214	V42GD0000208	ZENER DIODE
	D215	V42GD0000208	ZENER DIODE
	D216	V42GD0000208	ZENER DIODE

	D224	V42GD0000208	ZENER DIODE
	D225	V42GD0000208	ZENER DIODE
	D361	V42GD0000219	DIODE
	D362	V42GD0000219	DIODE
	D370	V42GD0000219	DIODE
	D371	V42GD0000219	DIODE
	D372	V42GD0000219	DIODE
	D382	V42GD0000219	DIODE
	D400	V42GD0000219	DIODE
	D401	V42GD0000219	DIODE
	D402	V42GD0000219	DIODE
	D403	V42GD0000257	SCHOTTKY BARRIER DIODE
	D404	V42GD0000257	SCHOTTKY BARRIER DIODE
	D500	V42GD0000245	SCHOTTKY BARRIER DIODE
	D888	V42GD0000199	ZENER DIODE
	D890	V42GD0000219	DIODE
	D891	V42GD0000219	DIODE
	D892	23362043	UDZSTE178.2B
	E100	VF2A00007600	BRACKET SHIELD SIG BOTTOM
	E101	VF2A00007500	BRACKET SHIELD SIG TOP ASM
	E105	23717215	SCREW
	E106	23717215	SCREW
	E107	23717215	SCREW
	E110	23355230	FSL-200BS
	FL201	V05A000010Q0	COIL
	FL301	V05A000002Q0	COIL
	FL302	V05A000002Q0	COIL
	FL303	V05A000002Q0	COIL
	FL304	V13GD0000251	CHIP BEADS INDUCTOR (1608)
	FL305	V13GD0000343	CHIP BEADS INDUCTOR (1608)
	FL306	V13GD0000343	CHIP BEADS INDUCTOR (1608)
	FL310	V01GD0001702	CHIP JUMPER 1608TYPE
	FL320	V13GD0000246	CHIP BEADS INDUCTOR
	FL326	V13GD0000252	CHIP BEADS INDUCTOR (1608)
	FL340	V13GD0000246	CHIP BEADS INDUCTOR
	FL413	V13GD0000252	CHIP BEADS INDUCTOR (1608)
	FL414	V13GD0000252	CHIP BEADS INDUCTOR (1608)
	FL415	V13GD0000249	CHIP BEADS INDUCTOR (2012)
	FL416	V13GD0000249	CHIP BEADS INDUCTOR (2012)
	FL417	V13GD0000249	CHIP BEADS INDUCTOR (2012)
	FL418	V13GD0000249	CHIP BEADS INDUCTOR (2012)

	FL419	V13GD0000249	CHIP BEADS INDUCTOR (2012)
	FL420	V13GD0000249	CHIP BEADS INDUCTOR (2012)
	FL421	V13GD0000249	CHIP BEADS INDUCTOR (2012)
	FL422	V13GD0000249	CHIP BEADS INDUCTOR (2012)
	FL423	V13GD0000249	CHIP BEADS INDUCTOR (2012)
	FL424	V13GD0000252	CHIP BEADS INDUCTOR (1608)
	FL425	V13GD0000252	CHIP BEADS INDUCTOR (1608)
	FL426	V13GD0000252	CHIP BEADS INDUCTOR (1608)
	FL427	V13GD0000249	CHIP BEADS INDUCTOR (2012)
	FL428	V13GD0000252	CHIP BEADS INDUCTOR (1608)
	FL432	V13GD0000343	CHIP BEADS INDUCTOR (1608)
	FL433	V13GD0000247	CHIP BEADS INDUCTOR
	FL434	V13GD0000247	CHIP BEADS INDUCTOR
	FL435	V13GD0000247	CHIP BEADS INDUCTOR
	FL436	V13GD0000246	CHIP BEADS INDUCTOR
	FL437	V13GD0000252	CHIP BEADS INDUCTOR (1608)
	FL801	V13GD0000343	CHIP BEADS INDUCTOR (1608)
	FL870	V13GD0000343	CHIP BEADS INDUCTOR (1608)
	FL920	V13GD0000299	CHIP BEADS INDUCTOR (1608)
	FL921	V13GD0000299	CHIP BEADS INDUCTOR (1608)
	FL922	V13GD0000299	CHIP BEADS INDUCTOR (1608)
	FL923	V13GD0000299	CHIP BEADS INDUCTOR (1608)
	FL924	V13GD0000299	CHIP BEADS INDUCTOR (1608)
	FL930	V13GD0000247	CHIP BEADS INDUCTOR
	FL931	V13GD0000246	CHIP BEADS INDUCTOR
	FL932	V13GD0000247	CHIP BEADS INDUCTOR
	FL933	V13GD0000246	CHIP BEADS INDUCTOR
	FL934	V13GD0000246	CHIP BEADS INDUCTOR
	FL935	V13GD0000246	CHIP BEADS INDUCTOR
	IC300	75003026	IC HDMI RECEIVER LSI
	IC310	V45GD0000549	EXCLUSIVE OR GATE
	IC333	V45GD0000444	INVERTER
	IC340	V47GD0001107	LOW DROPOUT VOLTAGE REGULATOR
	IC350	V47GD0000760	HIGH-PERFORMANCE PHASE-LOCKED
	IC360	V47GD0000571	AUDIO D/A CONVERTER
	IC371	V47GD0000998	DUAL AUDIO OP AMP
	IC380	V46GD0001463	4K(512X8)BIT EEPROM
	IC402	75001964	VOLTAGE REGULATOR
	IC403	V47GD0001109	BUCK CONVERTER
	IC404	V46GD0001475	16M(1MX16)BIT FLASH MEMORY
	IC410	V47GD0000702	LOW POWER-LOSS REGURATOR

	IC411	V47GD0000716	VOLTAGE REGULATOR
	IC413	V46GD0001233	128K(16KX8)BIT EEPROM
	IC420	V47GD0001110	STEP-DOWN CONVERTER
	IC700	75001880	IC
	IC701	V46GD0001210	128(8X16)MBIT DDR SDRAM
	IC702	V46GD0001210	128(8X16)MBIT DDR SDRAM
	IC705	V45GD0000483	DUAL BILATERAL SWITCH
	IC872	V47GD0001031	DC/DC CONVERTER
	IC873	V47GD0000938	CMOS RESET IC

Miscellaneous

	Location	Parts No.	Description
⚠	B001	75004518	LCD PANEL, LC370WU1-SL03
	H001	23321550	TUNER, ENGF7304GF
⚠	P801	23372353	POWER CORD, UK 250V3A FL/FUSE13
⚠	P801	23372298	POWER CORD, 250V2.5A
	PJ22B	75001874	CONNECTOR, B-B PLUG
	PP01	23845859	HOLDER, WIRE, PVC-C0AT, L=70MM
	PP02	23974994	BAND, KESSOKU
	PP08	23974994	BAND, KESSOKU
	W661	23351341	SPEAKER, SPK1410AW, 60X120 8-OHM 10W
	Z601	23103841	FERRITE CORE, TFE1014
	ZA03	75002111	CORE, E04RA120070060KAKO
	ZA05	75002111	CORE, E04RA120070060KAKO
	ZJ200	23103841	FERRITE CORE, TFE1014
	ZJ201	23103840	FERRITE CORE, TFE1013
	ZL106	23103841	FERRITE CORE, TFE1014

Accessory

	Location	Parts No.	Description
⚠	Y101	75003392	OWNERS MANUAL, ENGLISH
⚠	Y101E	75003448	MANUAL OWNERS, EURO
	Y102E	75005122	MANUAL OWNERS SP/IT, OWNERS MANUAL SP / IT
	Y110	75002118	OWNERS MANUAL, QUICK SET UP GUIDE
	Y114	75001980	SCHEMATIC DIAGRAM
	Y130	75002113	REMOCON HAND UNIT, CT-8002
	Y170	23845800	HOLDER, WIRE, NYLON66 D6.8

Cabinet

	Location	Parts No.	Description
	A201	75002124	FRONT BEZEL
	A315	75002076	PIECE, C COVER ASSY
	A320	75001971	PIECE, FRONT AV ASSY
	A330	75001968	PIECE, AC PAL
	A340	75001920	PIECE, BUTTON 7 KEY
	A380	23717240	SCREW, BITTB3X10SZN
	A401	75002075	BACK COVER
	A410	23717219	SCREW, PP3X8+SW+W SBN
	A411	23717267	SCREW, BITTB4X16 SBN
	A412	23738169	SCREW, BITTB 3X8 B ECO
	A420	75002077	STAND ASSY
	A430	75001924	CLAMP
	A440	23738074	SCREW, PP 5X16 SW+W SBN

Packing

	Location	Parts No.	Description
	A701	75005050	CARTON CASE, CASE
	A702A	75002080	PACKING, TOP PAD
	A702B	75002081	PACKING, BOTTOM PAD

U01A POWER (PE0028)

	Location	Parts No.	Description
*	U01A	75002126	PC BOARD ASSY, PE0028D1, POWER
⚠	C801	76503507	CAPACITOR, PLASTIC FILM, AC275V 0.22UF K
⚠	C802	76503507	CAPACITOR, PLASTIC FILM, AC275V 0.22UF K
⚠	C803	76503437	CAPACITOR, PLASTIC FILM, 630V 0.15UF J, 3D2J154J-A7
	C804	76214103	CAPACITOR, CERAMIC DISC, 500V B 0.01UF K
	C805	76092281	CAPACITOR, CERAMIC DISC, AC250V E 4700PF
	C810	76125035	CAPACITOR, ELECTROLYTIC, 450V 470UF M
⚠	C811	76092567	CAPACITOR, CERAMIC DISC, AC250V E 1000PF M
	C811A	23960136	ADHESIVE, SILICONE, TSE3843-W
⚠	C812	76092567	CAPACITOR, CERAMIC DISC, AC250V E 1000PF M
	C813	76503047	CAPACITOR, PLASTIC FILM, 63V 0.33UF J
	C815	76503049	CAPACITOR, PLASTIC FILM, 63V 0.47UF J
	C816	76073090	CAPACITOR, ELECTROLYTIC, 50V 100UF M
	C817	76567224	CAPACITOR, PLASTIC FILM, 50V 0.22UF J
	C819	76214101	CAPACITOR, CERAMIC DISC, 500V B 100PF K
	C820	76567224	CAPACITOR, PLASTIC FILM, 50V 0.22UF J
	C821	76092343	CAPACITOR, CERAMIC DISC, 2KV 680PF K
	C822	76092344	CAPACITOR, CERAMIC DISC, 2KV 820PF K
	C823	76092341	CAPACITOR, CERAMIC DISC, 2KV R 470PF K
	C824	76591102	CAPACITOR, PLASTIC FILM, 50V 1000PF J
	C825	76503053	CAPACITOR, PLASTIC FILM, 63V 1UF J
	C826	76092341	CAPACITOR, CERAMIC DISC, 2KV R 470PF K
	C827	76678229	CAPACITOR, ELECTROLYTIC, 200V 2.2UF M
	C883	76125039	CAPACITOR, ELECTROLYTIC, 35V 4700UF M
	C888	76109102	CAPACITOR, CERAMIC CHIP, 50V B 1000PF K
	C889	76073094	CAPACITOR, ELECTROLYTIC, 50V 1000UF M
	C890	76503047	CAPACITOR, PLASTIC FILM, 63V 0.33UF J
	C890A	23960136	ADHESIVE, SILICONE, TSE3843-W
	CE04	76092281	CAPACITOR, CERAMIC DISC, AC250V E 4700PF
	CE07	76503049	CAPACITOR, PLASTIC FILM, 63V 0.47UF J
	CE09	76668339	CAPACITOR, ELECTROLYTIC, 35V 3.3UF M
	CE10	76125040	CAPACITOR, ELECTROLYTIC, 450V 120UF M
	CE12	76503041	CAPACITOR, PLASTIC FILM, 63V 0.1UF J
⚠	CE13	76092565	CAPACITOR, CERAMIC DISC, AC250V B 470PF K
⚠	CE14	76092565	CAPACITOR, CERAMIC DISC, AC250V B 470PF K
	CE16	76073181	CAPACITOR, ELECTROLYTIC, 35V 56UF M
	CE17	76092339	CAPACITOR, CERAMIC DISC, 2KV 330PF K
	CE23	76214471	CAPACITOR, CERAMIC DISC, 500V B 470PF K
	CE24	76285104	CAPACITOR, CERAMIC CHIP, 50V B 0.1UF K

	CE29	76436331	CAPACITOR, CERAMIC DISC, 50V SL 330PF J
	CE43	76503041	CAPACITOR, PLASTIC FILM, 63V 0.1UF J
	CE82	76676470	CAPACITOR, ELECTROLYTIC, 100V 47UF M
	CE85	76073178	CAPACITOR, ELECTROLYTIC, 25V 3300UF M
	D801	23362200	DIODE, D5SB60, 7009F07
	D801B	23717240	SCREW, BITTB3X10SZN
	D805	23357627	DIODE, ZENER, RD9.1ESA B1
	D806	23357666	DIODE, ZENER, RD27ESA B3
	D809	23357654	DIODE, ZENER, RD36ESA B3
	D810	23357666	DIODE, ZENER, RD27ESA B3
	D811	23357511	DIODE, AG01A
	D812	23357852	DIODE, ZENER, MTZJ9.1C
	D813	23357512	DIODE, AL01Z
	D852	23357697	DIODE, 1SS133
	D883	75001877	DIODE, FMEN-220A
	D883B	23717240	SCREW, BITTB3X10SZN
	D884	75001877	DIODE, FMEN-220A
	D884B	23717240	SCREW, BITTB3X10SZN
	D885	23357408	DIODE, FMX-12S(023-108)
⚠	D899	75001869	VARISTOR, V1=470V 2500A/2
	DE01	23362204	DIODE, D3SB60, 7109F08
	DE02	23357511	DIODE, AG01A
	DE03	23357511	DIODE, AG01A
	DE05	23357104	DIODE, 1SS244
	DE06	23357366	DIODE, FR105-B5
	DE07	23357900	DIODE, ZENER, MTZJ33B
	DE09	23357842	DIODE, ZENER, MTZJ6.8B
	DE12	23357512	DIODE, AL01Z
	DE13	23357512	DIODE, AL01Z
	DE14	23357512	DIODE, AL01Z
	DE15	23357892	DIODE, ZENER, MTZJ27B
	DE16	23357880	DIODE, ZENER, MTZJ20B
	DE17	23357512	DIODE, AL01Z
	DE19	23357854	DIODE, ZENER, MTZJ10B
	DE72	23357366	DIODE, FR105-B5
	DE75	23357408	DIODE, FMX-12S(023-108)
	DE75B	23717240	SCREW, BITTB3X10SZN
⚠	F801	23144304	FUSE, CARTRIDGE 5.2X20, 250V 6.3A
	F801A	23165433	FUSE HOLDER, 5.2
	F801B	23165433	FUSE HOLDER, 5.2
⚠	F802	23144380	FUSE, RADIAL LEAD SUB-MINIATUR, 250V 3.15A

⚠	FE01	23144380	FUSE, RADIAL LEAD SUB-MINIATUR, 250V 3.15A
⚠	L801	23217846	TRANSFORMER, CHOKE, TPW2081AS
	L802	23217788	TRANSFORMER, CHOKE, TPW2070AS
	L805	23103302	FERRITE CHOKE, TEM2011AH
	L806	23248417	COIL, CHOKE, TLN3481AH
	L807	23248417	COIL, CHOKE, TLN3481AH
	L874	23103302	FERRITE CHOKE, TEM2011AH
	L875	23103302	FERRITE CHOKE, TEM2011AH
	L876	23103302	FERRITE CHOKE, TEM2011AH
	L878	23103302	FERRITE CHOKE, TEM2011AH
	L883	23248489	COIL, CHOKE, TLN3639AH
	LE06	23248417	COIL, CHOKE, TLN3481AH
	LE07	23248417	COIL, CHOKE, TLN3481AH
	LE11	23103302	FERRITE CHOKE, TEM2011AH
⚠	P801A	23713702	PLUG, 2P 11.88MM W VT
	P804	23713942	CONNECTOR, 10P, B10B-PH-K-S(LF)
	P805	23713942	CONNECTOR, 10P, B10B-PH-K-S(LF)
	P806B	23023384	PLUG, TWG-P13P-A1
	P813A	23713934	CONNECTOR, 2MM 3P S WHT, B3B-PH-K-S(LF)
	PG03	23165495	EARTH TERMINAL, MET31-0332
	PG04	23165495	EARTH TERMINAL, MET31-0332
	Q801	75001883	IC, STR-Z4569
⚠	Q826	23000823	IC, PHOTO COUPLER, TLP421F(GR)
	Q851	23205446	TRANSISTOR, 2SC2412K, Q T146
	Q852	23205446	TRANSISTOR, 2SC2412K, Q T146
	Q883	23135091	IC, SE024N
	QE01	23135072	IC, STRW6765
	QE01B	23717240	SCREW, BITTB3X10SZN
⚠	QE26	23000823	IC, PHOTO COUPLER, TLP421F(GR)
	QE83	23085587	IC, TA76431S
⚠	R801	76004716	RESISTOR, METAL GLAZE, 1/2W 2.2M OHM J
	R803	76366562	RESISTOR, CARBON FILM, 1/6W 5.6K OHM J
	R805	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
	R806	76552101	RESISTOR, OXIDE METAL FILM, 1/2W 100 OHM J
	R807	76366393	RESISTOR, CARBON FILM, 1/6W 39K OHM J
	R808	76552101	RESISTOR, OXIDE METAL FILM, 1/2W 100 OHM J
	R809	76321689	RESISTOR, OXIDE METAL FILM, 1/2W 6.8 OHM J
	R812	76552681	RESISTOR, OXIDE METAL FILM, 1/2W 680 OHM J
	R813	76366270	RESISTOR, CARBON FILM, 1/6W 27 OHM J
	R814	76552390	RESISTOR, OXIDE METAL FILM, 1/2W 39 OHM J
	R815	76552100	RESISTOR, OXIDE METAL FILM, 1/2W 10 OHM J

	R816	76011221	RESISTOR, CHIP, 1/20W 220 OHM J
	R817	76377224	RESISTOR, CARBON FILM, 1W 220K OHM J
	R821	76322689	RESISTOR, OXIDE METAL FILM, 1W 6.8 OHM J
	R827	76383103	RESISTOR, OXIDE METAL FILM, 2W 10K OHM J
	R828	76383103	RESISTOR, OXIDE METAL FILM, 2W 10K OHM J
	R853	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	R854	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
	R869	76011472	RESISTOR, CHIP, 1/20W 4.7K OHM J
	R873	76871152	RESISTOR, CHIP, 1/8W 1.5K OHM J
	R874	76000445	CHIP JUMPER, 1608TYPE
	R890	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
⚠	R899	76004718	RESISTOR, METAL GLAZE, 1/2W 8.2M OHM J
	RE03	76382104	RESISTOR, OXIDE METAL FILM, 1W 100K OHM J
	RE04	76382104	RESISTOR, OXIDE METAL FILM, 1W 100K OHM J
	RE12	76552221	RESISTOR, OXIDE METAL FILM, 1/2W 220 OHM J
	RE13	76366273	RESISTOR, CARBON FILM, 1/6W 27K OHM J
	RE15	76366102	RESISTOR, CARBON FILM, 1/6W 1K OHM J
	RE16	76366102	RESISTOR, CARBON FILM, 1/6W 1K OHM J
	RE17	76366363	RESISTOR, CARBON FILM, 1/6W 36K OHM J
	RE18	76079010	RESISTOR, METAL FILM, 2W 0.47 OHM J
	RE19	76310829	RESISTOR, METAL FILM, 1/2W 8.2 OHM J
	RE23	76552152	RESISTOR, OXIDE METAL FILM, 1/2W 1.5K OHM J
	RE38	76871222	RESISTOR, CHIP, 1/8W 2.2K OHM J
	RE39	76011152	RESISTOR, CHIP, 1/20W 1.5K OHM J
	RE43	76011753	RESISTOR, CHIP, 1/20W 75K OHM J
	RE44	76000593	RESISTOR, CHIP, 1/16W 10K OHM F
	RE46	76000448	RESISTOR, CHIP, 1/16W 1.8K OHM F
	RE48	76011222	RESISTOR, CHIP, 1/20W 2.2K OHM J
⚠	SR81	23146597	RELAY, DC5V 0.25W, DG5D1-O(M)-2
⚠	T801	23211886	COIL, LINE FILTER, TRF3253AH
⚠	T802	23211886	COIL, LINE FILTER, TRF3253AH
⚠	T862	23217839	TRANSFORMER, CONVERTER, TPW3584AS
⚠	TE62	23217841	TRANSFORMER, CONVERTER, TPW3586AD
	Z889	23144195	PROTECTOR, 20PSERIES 125V 5A
	ZE72	23144185	PROTECTOR, 20PSERIES, 125V 1A
	ZE75	23144195	PROTECTOR, 20PSERIES 125V 5A

U01B LOW B (PE0028)

	Location	Parts No.	Description
*	U01B	75002127	PC BOARD ASSY, PE0028D2, LOW_B
	C851	76092538	CAPACITOR, CERAMIC CHIP, 10V F 1UF Z
	C852	76109102	CAPACITOR, CERAMIC CHIP, 50V B 1000PF K
	CE35	76539334	CAPACITOR, PLASTIC FILM, 50V 0.33UF J
	CE36	76073150	CAPACITOR, ELECTROLYTIC, 16V 56UF M
	CE40	76073183	CAPACITOR, ELECTROLYTIC, 35V 220UF M
	CE42	76539104	CAPACITOR, PLASTIC FILM, 50V 0.1UF J
	CE51	76617023	CAPACITOR, ELECTROLYTIC, 16V 330UF M
	CE52	76092179	CAPACITOR, CERAMIC CHIP, 25V B 0.22UF K
	CE53	76092179	CAPACITOR, CERAMIC CHIP, 25V B 0.22UF K
	CE55	76073181	CAPACITOR, ELECTROLYTIC, 35V 56UF M
	CE87	76669100	CAPACITOR, ELECTROLYTIC, 50V 10UF M
	CE90	76503047	CAPACITOR, PLASTIC FILM, 63V 0.33UF J
	CE91	76503041	CAPACITOR, PLASTIC FILM, 63V 0.1UF J
	CE92	76794101	CAPACITOR, ELECTROLYTIC, 16V 100UF M
	CE95	76092179	CAPACITOR, CERAMIC CHIP, 25V B 0.22UF K
	CE96	76073189	CAPACITOR, ELECTROLYTIC, 35V 1000UF M
	CE97	76795101	CAPACITOR, ELECTROLYTIC, 25V 100UF M
	D860	23357871	DIODE, ZENER, MTZJ15B
	DE50	23357706	DIODE, AK04
	DE51	23357842	DIODE, ZENER, MTZJ6.8B
	DE52	23357703	DIODE, 1SS355
	DE54	23357703	DIODE, 1SS355
	DE55	23357783	DIODE, ZENER, MA8180-L,TX
	DE56	23357800	DIODE, ZENER, MA8300-H
	DE76	23357835	DIODE, ZENER, MTZJ5.1C
	DE90	23357866	DIODE, ZENER, MTZJ12C
	DE92	23357855	DIODE, ZENER, MTZJ10C
	DE93	23357862	DIODE, ZENER, MTZJ11B
	DE94	23357862	DIODE, ZENER, MTZJ11B
	DE96	23357867	DIODE, ZENER, MTZJ13A
	DE97	23357703	DIODE, 1SS355
	DE98	23357844	DIODE, ZENER, MTZJ7.5A
	GE50	23103302	FERRITE CHOKE, TEM2011AH
	GE51	76000445	CHIP JUMPER, 1608TYPE
	LE52	23289049	COIL, PEAKING, TRF4330AU
	LE53	23248399	COIL, CHOKE, TLN3283D
	LE73	23248417	COIL, CHOKE, TLN3481AH
	P803A	23713819	SOCKET, TWG-P23X-A1

	P806A	23713816	SOCKET, 127301113K2
	P810A	23713814	SOCKET, 127301109K2
	P813B	23713934	CONNECTOR, 2MM 3P S WHT, B3B-PH-K-S(LF)
	PG02	23165495	EARTH TERMINAL, MET31-0332
	PL106	23713758	PLUG, 7P 2.5MM G, B7B-EH-F1-TV4
	Q853	23205443	TRANSISTOR, 2SA1162-Y(F)
	Q854	23205446	TRANSISTOR, 2SC2412K, Q T146
	Q855	23205446	TRANSISTOR, 2SC2412K, Q T146
	Q856	23205327	TRANSISTOR, RN1406(F)
	Q860	75001881	IC, CE-1059
	QE35	23009998	IC, BA00JC5WT-V5
	QE40	23085463	IC, SI-8050E
	QE52	23205567	TRANSISTOR, RN2403(TE85L,F)
	QE53	23205330	TRANSISTOR, RN1403(F)
	QE64	23085415	IC, BD4746G
	QE71	75001881	IC, CE-1059
	QE74	23205330	TRANSISTOR, RN1403(F)
	QE75	75001881	IC, CE-1059
	QE82	23205446	TRANSISTOR, 2SC2412K, Q T146
	QE90	23085423	IC, KIA7809API-U/P
	QE90B	23717240	SCREW, BITTB3X10SZN
	QE92	75001881	IC, CE-1059
	QE94	23205292	TRANSISTOR, 2SD2396
	QE94B	23717240	SCREW, BITTB3X10SZN
	QE95	23205330	TRANSISTOR, RN1403(F)
	QE96	75001876	TRANSISTOR, TPC8111(TE12L,Q)
	QE97	23205569	TRANSISTOR, 2SC2713-GR(TE85L,F
	QE98	23205568	TRANSISTOR, 2SA1163-GR(TE85L,F
	R850	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	R851	76011471	RESISTOR, CHIP, 1/20W 470 OHM J
	R852	76011471	RESISTOR, CHIP, 1/20W 470 OHM J
	R855	76011471	RESISTOR, CHIP, 1/20W 470 OHM J
	R856	76011471	RESISTOR, CHIP, 1/20W 470 OHM J
	R857	76011471	RESISTOR, CHIP, 1/20W 470 OHM J
	R858	76011471	RESISTOR, CHIP, 1/20W 470 OHM J
	R859	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
	R860	76000445	CHIP JUMPER, 1608TYPE
	R862	76011121	RESISTOR, CHIP, 1/20W 120 OHM J
	R863	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	RE35	76000529	RESIST0R, METAL FILM, 1/4W 6.8K OHM F
	RE36	76182048	RESISTOR, METAL FILM, 1/4W 220 OHM F

	RE37	76000529	RESIST0R, METAL FILM, 1/4W 6.8K OHM F
	RE51	76000445	CHIP JUMPER, 1608TYPE
	RE52	76011151	RESISTOR, CHIP, 1/20W 150 OHM J
	RE53	76871222	RESISTOR, CHIP, 1/8W 2.2K OHM J
	RE54	76871222	RESISTOR, CHIP, 1/8W 2.2K OHM J
	RE56	76000574	RESISTOR, CHIP, 1/16W 2.7K OHM F
	RE57	76000552	RESISTOR, CHIP, 1/16W 390 OHM F
	RE58	76190013	RESISTOR, CHIP, 1/16W 22K OHM F
	RE59	76011333	RESISTOR, CHIP, 1/20W 33K OHM J
	RE60	76011562	RESISTOR, CHIP, 1/20W 5.6K OHM J
	RE61	76190014	RESISTOR, CHIP, 1/16W 18K OHM F
	RE71	76011822	RESISTOR, CHIP, 1/20W 8.2K OHM J
	RE72	76000445	CHIP JUMPER, 1608TYPE
	RE73	76871122	RESISTOR, CHIP, 1/8W 1.2K OHM J
	RE74	76871122	RESISTOR, CHIP, 1/8W 1.2K OHM J
	RE82	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RE83	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RE88	76011222	RESISTOR, CHIP, 1/20W 2.2K OHM J
	RE91	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	RE92	76011472	RESISTOR, CHIP, 1/20W 4.7K OHM J
	RE93	76011223	RESISTOR, CHIP, 1/20W 22K OHM J
	RE94	76011122	RESISTOR, CHIP, 1/20W 1.2K OHM J
	RE95	76553122	RESISTOR, OXIDE METAL FILM, 1W 1.2K OHM J
	RE96	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RE97	76011562	RESISTOR, CHIP, 1/20W 5.6K OHM J
	RE98	76011104	RESISTOR, CHIP, 1/20W 100K OHM J
	ZE91	23144189	PROTECTOR, 20PSERIES 125V 2A

U02A AV TERMINAL (PE0029)

	Location	Parts No.	Description
*	U02A	75002060	PC BOARD ASSY, PE0029A1, AV_TERMINAL
	C101	76109103	CAPACITOR, CERAMIC CHIP, 50V B 0.01UF K
	C102	76073019	CAPACITOR, ELECTROLYTIC, 10V 470UF M
	C103	76109102	CAPACITOR, CERAMIC CHIP, 50V B 1000PF K
	C104	76766479	CAPACITOR, ELECTROLYTIC, 50V 4.7UF M
	C105	76073019	CAPACITOR, ELECTROLYTIC, 10V 470UF M
	C162	76105101	CAPACITOR, CERAMIC CHIP, 50V CH 100PF J
	C164	76100103	CAPACITOR, CERAMIC CHIP, 50V F 0.01UF Z
	C190	76092730	CAPACITOR, CERAMIC CHIP, 16V B 0.1UF K
	C191	76092789	CAPACITOR, CERAMIC CHIP, 6.3V B 1UF K
	C192	76109103	CAPACITOR, CERAMIC CHIP, 50V B 0.01UF K
	C414	76794470	CAPACITOR, ELECTROLYTIC, 16V 47UF M
	C415	76100104	CAPACITOR, CERAMIC CHIP, 25V F 0.1UF Z
	C416	76092731	CAPACITOR, CERAMIC CHIP, 16V B 1UF K
	C417	76109221	CAPACITOR, CERAMIC CHIP, 50V B 220PF K
	C419	76109222	CAPACITOR, CERAMIC CHIP, 50V B 2200PF K
	C457	76092731	CAPACITOR, CERAMIC CHIP, 16V B 1UF K
	C458	76100104	CAPACITOR, CERAMIC CHIP, 25V F 0.1UF Z
	C459	76105220	CAPACITOR, CERAMIC CHIP, 50V CH 22PF J
	C460	76109221	CAPACITOR, CERAMIC CHIP, 50V B 220PF K
	C461	76109152	CAPACITOR, CERAMIC CHIP, 50V B 1500PF K
	C462	76109222	CAPACITOR, CERAMIC CHIP, 50V B 2200PF K
	C463	76092730	CAPACITOR, CERAMIC CHIP, 16V B 0.1UF K
	C465	76109152	CAPACITOR, CERAMIC CHIP, 50V B 1500PF K
	C601	76092730	CAPACITOR, CERAMIC CHIP, 16V B 0.1UF K
	C602	76109331	CAPACITOR, CERAMIC CHIP, 50V B 330PF K
	C603	76092730	CAPACITOR, CERAMIC CHIP, 16V B 0.1UF K
	C606	76092611	CAPACITOR, CERAMIC CHIP, 6.3V B 2.2UF K
	C608	76092730	CAPACITOR, CERAMIC CHIP, 16V B 0.1UF K
	C610	76092731	CAPACITOR, CERAMIC CHIP, 16V B 1UF K
	C611	76092730	CAPACITOR, CERAMIC CHIP, 16V B 0.1UF K
	C613	76092731	CAPACITOR, CERAMIC CHIP, 16V B 1UF K
	C614	76092730	CAPACITOR, CERAMIC CHIP, 16V B 0.1UF K
	C620	76092463	CAPACITOR, CERAMIC CHIP, 16V B 0.22UF K
	C621	76092730	CAPACITOR, CERAMIC CHIP, 16V B 0.1UF K
	C622	76092463	CAPACITOR, CERAMIC CHIP, 16V B 0.22UF K
	C623	76092463	CAPACITOR, CERAMIC CHIP, 16V B 0.22UF K
	C624	76092730	CAPACITOR, CERAMIC CHIP, 16V B 0.1UF K
	C625	76092463	CAPACITOR, CERAMIC CHIP, 16V B 0.22UF K

	C627	76092730	CAPACITOR, CERAMIC CHIP, 16V B 0.1UF K
	C629	76669010	CAPACITOR, ELECTROLYTIC, 50V 1UF M
	C630	76092730	CAPACITOR, CERAMIC CHIP, 16V B 0.1UF K
	C635	76666221	CAPACITOR, ELECTROLYTIC, 16V 220UF M
	C636	76666221	CAPACITOR, ELECTROLYTIC, 16V 220UF M
	C640	76092738	CAPACITOR, CERAMIC CHIP, 25V B 0.47UF K
	C641	76092738	CAPACITOR, CERAMIC CHIP, 25V B 0.47UF K
	C642	76285104	CAPACITOR, CERAMIC CHIP, 50V B 0.1UF K
	C643	76285104	CAPACITOR, CERAMIC CHIP, 50V B 0.1UF K
	C645	76109103	CAPACITOR, CERAMIC CHIP, 50V B 0.01UF K
	C665	76669339	CAPACITOR, ELECTROLYTIC, 50V 3.3UF M
	C666	76669339	CAPACITOR, ELECTROLYTIC, 50V 3.3UF M
	C667	76092515	CAPACITOR, CERAMIC CHIP, 16V F 4.7UF Z
	C669	76092515	CAPACITOR, CERAMIC CHIP, 16V F 4.7UF Z
	C672	76092726	CAPACITOR, CERAMIC CHIP, 10V B 2.2UF K
	C673	76092726	CAPACITOR, CERAMIC CHIP, 10V B 2.2UF K
	C675	76105221	CAPACITOR, CERAMIC CHIP, 50V CH 220PF J
	C676	76105221	CAPACITOR, CERAMIC CHIP, 50V CH 220PF J
	C677	76109391	CAPACITOR, CERAMIC CHIP, 50V B 390PF K
	C678	76109391	CAPACITOR, CERAMIC CHIP, 50V B 390PF K
	C685	76669010	CAPACITOR, ELECTROLYTIC, 50V 1UF M
	C686	76092463	CAPACITOR, CERAMIC CHIP, 16V B 0.22UF K
	C689	76092463	CAPACITOR, CERAMIC CHIP, 16V B 0.22UF K
	C690	76664102	CAPACITOR, ELECTROLYTIC, 6.3V 1000UF M
	C691	76666470	CAPACITOR, ELECTORLYTIC, 16V 47UF M
	C692	76666470	CAPACITOR, ELECTORLYTIC, 16V 47UF M
	C693	76092795	CAPACITOR, CERAMIC CHIP, 6.3V B 2.2UF K
	C695	76665471	CAPACITOR, ELECTROLYTIC, 10V 470UF M
	C696	76665471	CAPACITOR, ELECTROLYTIC, 10V 470UF M
	C4073	76105220	CAPACITOR, CERAMIC CHIP, 50V CH 22PF J
	CA01	76092538	CAPACITOR, CERAMIC CHIP, 10V F 1UF Z
	CA02	76105101	CAPACITOR, CERAMIC CHIP, 50V CH 100PF J
	CA06	76105100	CAPACITOR, CERAMIC CHIP, 50V CH 10PF D
	CA07	76105090	CAPACITOR, CERAMIC CHIP, 50V CH 9PF C
	CA19	76092538	CAPACITOR, CERAMIC CHIP, 10V F 1UF Z
	CA70	76100104	CAPACITOR, CERAMIC CHIP, 25V F 0.1UF Z
	CA71	76100104	CAPACITOR, CERAMIC CHIP, 25V F 0.1UF Z
	CA90	76100104	CAPACITOR, CERAMIC CHIP, 25V F 0.1UF Z
	CA91	76105101	CAPACITOR, CERAMIC CHIP, 50V CH 100PF J
	CA92	76105101	CAPACITOR, CERAMIC CHIP, 50V CH 100PF J
	CA93	76105101	CAPACITOR, CERAMIC CHIP, 50V CH 100PF J

	CC01	76109102	CAPACITOR, CERAMIC CHIP, 50V B 1000PF K
	CC02	76109102	CAPACITOR, CERAMIC CHIP, 50V B 1000PF K
	CC03	76109152	CAPACITOR, CERAMIC CHIP, 50V B 1500PF K
	CC04	76109152	CAPACITOR, CERAMIC CHIP, 50V B 1500PF K
	CC05	76109102	CAPACITOR, CERAMIC CHIP, 50V B 1000PF K
	CC06	76109102	CAPACITOR, CERAMIC CHIP, 50V B 1000PF K
	CC07	76109152	CAPACITOR, CERAMIC CHIP, 50V B 1500PF K
	CC08	76109152	CAPACITOR, CERAMIC CHIP, 50V B 1500PF K
	CC32	76105100	CAPACITOR, CERAMIC CHIP, 50V CH 10PF D
	CD80	76666470	CAPACITOR, ELECTORLYTIC, 16V 47UF M
	CD82	76669100	CAPACITOR, ELECTROLYTIC, 50V 10UF M
	CG01	76669100	CAPACITOR, ELECTROLYTIC, 50V 10UF M
	CG02	76109152	CAPACITOR, CERAMIC CHIP, 50V B 1500PF K
	CG03	76109471	CAPACITOR, CERAMIC CHIP, 50V B 470PF K
	CG04	76109221	CAPACITOR, CERAMIC CHIP, 50V B 220PF K
	CG05	76092730	CAPACITOR, CERAMIC CHIP, 16V B 0.1UF K
	CG06	76669100	CAPACITOR, ELECTROLYTIC, 50V 10UF M
	CG07	76669100	CAPACITOR, ELECTROLYTIC, 50V 10UF M
	CG09	76669220	CAPACITOR, ELECTROLYTIC, 50V 22UF M
	CG10	76669220	CAPACITOR, ELECTROLYTIC, 50V 22UF M
	CG11	76669220	CAPACITOR, ELECTROLYTIC, 50V 22UF M
	CG12	76669220	CAPACITOR, ELECTROLYTIC, 50V 22UF M
	CG13	76669100	CAPACITOR, ELECTROLYTIC, 50V 10UF M
	CG14	76669100	CAPACITOR, ELECTROLYTIC, 50V 10UF M
	CG15	76105101	CAPACITOR, CERAMIC CHIP, 50V CH 100PF J
	CG16	76105101	CAPACITOR, CERAMIC CHIP, 50V CH 100PF J
	CG17	76669470	CAPACITOR, ELECTROLYTIC, 50V 47UF M
	CG20	76669100	CAPACITOR, ELECTROLYTIC, 50V 10UF M
	CG21	76092730	CAPACITOR, CERAMIC CHIP, 16V B 0.1UF K
	CG22	76669100	CAPACITOR, ELECTROLYTIC, 50V 10UF M
	CG23	76109103	CAPACITOR, CERAMIC CHIP, 50V B 0.01UF K
	CG24	76669339	CAPACITOR, ELECTROLYTIC, 50V 3.3UF M
	CG25	76092730	CAPACITOR, CERAMIC CHIP, 16V B 0.1UF K
	CG26	76092726	CAPACITOR, CERAMIC CHIP, 10V B 2.2UF K
	CG27	76092726	CAPACITOR, CERAMIC CHIP, 10V B 2.2UF K
	CG28	76092726	CAPACITOR, CERAMIC CHIP, 10V B 2.2UF K
	CG29	76092726	CAPACITOR, CERAMIC CHIP, 10V B 2.2UF K
	CG30	76092726	CAPACITOR, CERAMIC CHIP, 10V B 2.2UF K
	CG31	76092726	CAPACITOR, CERAMIC CHIP, 10V B 2.2UF K
	CG32	76092726	CAPACITOR, CERAMIC CHIP, 10V B 2.2UF K
	CG33	76092726	CAPACITOR, CERAMIC CHIP, 10V B 2.2UF K

	CG34	76092730	CAPACITOR, CERAMIC CHIP, 16V B 0.1UF K
	CG35	76669100	CAPACITOR, ELECTROLYTIC, 50V 10UF M
	CG36	76669100	CAPACITOR, ELECTROLYTIC, 50V 10UF M
	CG37	76109152	CAPACITOR, CERAMIC CHIP, 50V B 1500PF K
	CG38	76109471	CAPACITOR, CERAMIC CHIP, 50V B 470PF K
	CG39	76105560	CAPACITOR, CERAMIC CHIP, 50V CH 56PF J
	CG40	76105560	CAPACITOR, CERAMIC CHIP, 50V CH 56PF J
	CG41	76105560	CAPACITOR, CERAMIC CHIP, 50V CH 56PF J
	CG42	76105050	CAPACITOR, CERAMIC CHIP, 50V CH 5PF C
	CG43	76105010	CAPACITOR, CERAMIC CHIP, 50V CK 1PF C
	CG44	76109102	CAPACITOR, CERAMIC CHIP, 50V B 1000PF K
	CG45	76109102	CAPACITOR, CERAMIC CHIP, 50V B 1000PF K
	CG46	76109102	CAPACITOR, CERAMIC CHIP, 50V B 1000PF K
	CG50	76669100	CAPACITOR, ELECTROLYTIC, 50V 10UF M
	CG51	76669100	CAPACITOR, ELECTROLYTIC, 50V 10UF M
	CG52	76105101	CAPACITOR, CERAMIC CHIP, 50V CH 100PF J
	CG53	76105101	CAPACITOR, CERAMIC CHIP, 50V CH 100PF J
	CG54	76109102	CAPACITOR, CERAMIC CHIP, 50V B 1000PF K
	CG55	76109102	CAPACITOR, CERAMIC CHIP, 50V B 1000PF K
	CS01	76092726	CAPACITOR, CERAMIC CHIP, 10V B 2.2UF K
	CS02	76092726	CAPACITOR, CERAMIC CHIP, 10V B 2.2UF K
	CS03	76092726	CAPACITOR, CERAMIC CHIP, 10V B 2.2UF K
	CS04	76797470	CAPACITOR, ELECTROLYTIC, 50V 47UF M
	CS05	76092726	CAPACITOR, CERAMIC CHIP, 10V B 2.2UF K
	CS06	76092726	CAPACITOR, CERAMIC CHIP, 10V B 2.2UF K
	CS07	76092726	CAPACITOR, CERAMIC CHIP, 10V B 2.2UF K
	CS08	76092726	CAPACITOR, CERAMIC CHIP, 10V B 2.2UF K
	CS09	76092726	CAPACITOR, CERAMIC CHIP, 10V B 2.2UF K
	CS10	76797470	CAPACITOR, ELECTROLYTIC, 50V 47UF M
	CS11	76092726	CAPACITOR, CERAMIC CHIP, 10V B 2.2UF K
	CS12	76092726	CAPACITOR, CERAMIC CHIP, 10V B 2.2UF K
	CS13	76797479	CAPACITOR, ELECTROLYTIC, 50V 4.7UF M
	CS14	76797479	CAPACITOR, ELECTROLYTIC, 50V 4.7UF M
	CS15	76797100	CAPACITOR, ELECTROLYTIC, 50V 10UF M
	CS16	76797100	CAPACITOR, ELECTROLYTIC, 50V 10UF M
	CS17	76092726	CAPACITOR, CERAMIC CHIP, 10V B 2.2UF K
	CS18	76092726	CAPACITOR, CERAMIC CHIP, 10V B 2.2UF K
	CS19	76797470	CAPACITOR, ELECTROLYTIC, 50V 47UF M
	CS20	76092726	CAPACITOR, CERAMIC CHIP, 10V B 2.2UF K
	CS21	76092726	CAPACITOR, CERAMIC CHIP, 10V B 2.2UF K
	CS22	76797479	CAPACITOR, ELECTROLYTIC, 50V 4.7UF M

	CS23	76797479	CAPACITOR, ELECTROLYTIC, 50V 4.7UF M
	CS24	76797100	CAPACITOR, ELECTROLYTIC, 50V 10UF M
	CS25	76797100	CAPACITOR, ELECTROLYTIC, 50V 10UF M
	CS26	76766100	CAPACITOR, ELECTROLYTIC, 50V 10UF M
	CS27	76766100	CAPACITOR, ELECTROLYTIC, 50V 10UF M
	CS28	76766100	CAPACITOR, ELECTROLYTIC, 50V 10UF M
	CS31	76073086	CAPACITOR, ELECTROLYTIC, 50V 10UF M
	CS32	76092611	CAPACITOR, CERAMIC CHIP, 6.3V B 2.2UF K
	CS33	76092515	CAPACITOR, CERAMIC CHIP, 16V F 4.7UF Z
	CS34	76092731	CAPACITOR, CERAMIC CHIP, 16V B 1UF K
	CS35	76092611	CAPACITOR, CERAMIC CHIP, 6.3V B 2.2UF K
	CS50	76109102	CAPACITOR, CERAMIC CHIP, 50V B 1000PF K
	CS51	76109102	CAPACITOR, CERAMIC CHIP, 50V B 1000PF K
	CS91	76105101	CAPACITOR, CERAMIC CHIP, 50V CH 100PF J
	CS92	76105101	CAPACITOR, CERAMIC CHIP, 50V CH 100PF J
	CV50	76100104	CAPACITOR, CERAMIC CHIP, 25V F 0.1UF Z
	CV51	76794100	CAPACITOR, ELECTROLYTIC, 16V 10UF M
	CV52	76794100	CAPACITOR, ELECTROLYTIC, 16V 10UF M
	CV53	76100104	CAPACITOR, CERAMIC CHIP, 25V F 0.1UF Z
	CV54	76794100	CAPACITOR, ELECTROLYTIC, 16V 10UF M
	CV55	76794100	CAPACITOR, ELECTROLYTIC, 16V 10UF M
	CV56	76794100	CAPACITOR, ELECTROLYTIC, 16V 10UF M
	CV57	76100104	CAPACITOR, CERAMIC CHIP, 25V F 0.1UF Z
	CV60	76100104	CAPACITOR, CERAMIC CHIP, 25V F 0.1UF Z
	CV61	76100104	CAPACITOR, CERAMIC CHIP, 25V F 0.1UF Z
	CV90	76100104	CAPACITOR, CERAMIC CHIP, 25V F 0.1UF Z
	CV201	76794101	CAPACITOR, ELECTROLYTIC, 16V 100UF M
	CV210	76092621	CAPACITOR, CERAMIC CHIP, 10V B 1UF K
	CV211	76092621	CAPACITOR, CERAMIC CHIP, 10V B 1UF K
	CV212	76793471	CAPACITOR, ELECTROLYTIC, 10V 470UF M
	CV213	76100104	CAPACITOR, CERAMIC CHIP, 25V F 0.1UF Z
	CV221	76092621	CAPACITOR, CERAMIC CHIP, 10V B 1UF K
	CV222	76092621	CAPACITOR, CERAMIC CHIP, 10V B 1UF K
	CV223	76100104	CAPACITOR, CERAMIC CHIP, 25V F 0.1UF Z
	CV224	76793471	CAPACITOR, ELECTROLYTIC, 10V 470UF M
	CV231	76092621	CAPACITOR, CERAMIC CHIP, 10V B 1UF K
	CV232	76092621	CAPACITOR, CERAMIC CHIP, 10V B 1UF K
	CV233	76100104	CAPACITOR, CERAMIC CHIP, 25V F 0.1UF Z
	CV234	76793471	CAPACITOR, ELECTROLYTIC, 10V 470UF M
	D401	23357703	DIODE, 1SS355
	D608	23357765	DIODE, ZENER, MA8100-M

	D621	23362140	DIODE, KDS160-RTK
	D622	23362214	DIODE, SCHOTTKY, RSX301L-30 TE25
	D623	23362214	DIODE, SCHOTTKY, RSX301L-30 TE25
	D624	23362140	DIODE, KDS160-RTK
	D625	23362140	DIODE, KDS160-RTK
	D626	23362214	DIODE, SCHOTTKY, RSX301L-30 TE25
	D627	23362214	DIODE, SCHOTTKY, RSX301L-30 TE25
	D628	23362140	DIODE, KDS160-RTK
	D640	23362140	DIODE, KDS160-RTK
	D642	23362140	DIODE, KDS160-RTK
	D650	23357778	DIODE, ZENER, MA8150-M
	D652	23357747	DIODE, ZENER, MA8062-L
	D670	23362140	DIODE, KDS160-RTK
	D671	23362140	DIODE, KDS160-RTK
	D672	23362140	DIODE, KDS160-RTK
	D673	23362140	DIODE, KDS160-RTK
	D676	23362140	DIODE, KDS160-RTK
	D677	23362140	DIODE, KDS160-RTK
	D678	23362140	DIODE, KDS160-RTK
	D679	23362140	DIODE, KDS160-RTK
	DA02	23357703	DIODE, 1SS355
	DA03	23357730	DIODE, ZENER, MA8033-L
	DA11	23357703	DIODE, 1SS355
	DA15	23357745	DIODE, ZENER, MA8056-M
	DA16	23357745	DIODE, ZENER, MA8056-M
	DA17	23357751	DIODE, ZENER, MA8068-M
	DA18	23357751	DIODE, ZENER, MA8068-M
	DE96	23357840	DIODE, ZENER, MTZJ6.2B
	DG01	23357742	DIODE, ZENER, MA8051-M
	DS03	23362140	DIODE, KDS160-RTK
	DS04	23362140	DIODE, KDS160-RTK
	DS05	23362140	DIODE, KDS160-RTK
	DS06	23362140	DIODE, KDS160-RTK
	DS10	23362140	DIODE, KDS160-RTK
	DS11	23357744	DIODE, ZENER, MA8056-L
	DV02	23362140	DIODE, KDS160-RTK
	DV03	23362140	DIODE, KDS160-RTK
	DV04	23362140	DIODE, KDS160-RTK
	DV05	23362140	DIODE, KDS160-RTK
	DV06	23357762	DIODE, ZENER, MA8091-M
	GJ41	76000445	CHIP JUMPER, 1608TYPE

	GJ42	76000445	CHIP JUMPER, 1608TYPE
	GR01	76000445	CHIP JUMPER, 1608TYPE
	GR25	76000445	CHIP JUMPER, 1608TYPE
	GR26	76000445	CHIP JUMPER, 1608TYPE
	GR27	76000445	CHIP JUMPER, 1608TYPE
	GR28	76000445	CHIP JUMPER, 1608TYPE
	GR31	76000445	CHIP JUMPER, 1608TYPE
	GR32	76000445	CHIP JUMPER, 1608TYPE
	GR33	76000445	CHIP JUMPER, 1608TYPE
	GR35	76000445	CHIP JUMPER, 1608TYPE
	GR36	76000445	CHIP JUMPER, 1608TYPE
	GR37	76000445	CHIP JUMPER, 1608TYPE
	GR603	76000445	CHIP JUMPER, 1608TYPE
	L101	23248398	COIL, CHOKE, TLN3278D
	L102	23103233	INDUCTOR, BEAD, TEM2137AD
	L103	23103233	INDUCTOR, BEAD, TEM2137AD
	L104	76000445	CHIP JUMPER, 1608TYPE
	L191	23103233	INDUCTOR, BEAD, TEM2137AD
	L414	23289043	COIL, PEAKING, TRF4100AU
	L620	23246406	COIL, CHOKE, TLN3528AF
	L621	23246406	COIL, CHOKE, TLN3528AF
	L622	23246406	COIL, CHOKE, TLN3528AF
	L623	23246406	COIL, CHOKE, TLN3528AF
	L640	76000445	CHIP JUMPER, 1608TYPE
	L655	23103233	INDUCTOR, BEAD, TEM2137AD
	LA90	23103230	BEAD INDUCTOR, TEM2134AD
	LA91	23103230	BEAD INDUCTOR, TEM2134AD
	LA92	23103230	BEAD INDUCTOR, TEM2134AD
	LA93	23103230	BEAD INDUCTOR, TEM2134AD
	LC01	23103828	BEAD INDUCTOR, TEM2121M
	LC02	23103828	BEAD INDUCTOR, TEM2121M
	LC05	23103828	BEAD INDUCTOR, TEM2121M
	LC06	23103828	BEAD INDUCTOR, TEM2121M
	LG01	23103825	BEAD INDUCTOR, TEM2118M
	LG02	23103825	BEAD INDUCTOR, TEM2118M
	LV202	23103314	COIL, FILTER, TEM2028AH
	NV11	23960136	ADHESIVE, SILICONE, TSE3843-W
	P601	23713755	PLUG, 4P 2.5MM G, B4B-EH-F1-TV4
	PH01	75001989	CONNECTOR, MULTI 21P, CSS5021-9C01F
	PH02	75001989	CONNECTOR, MULTI 21P, CSS5021-9C01F
	PJ22A	75001873	CONNECTOR, B-B RECEPTACLE

	PJ80A	23023384	PLUG, TWG-P13P-A1
	PL212	23713938	CONNECTOR, B5B-PH-K-S(LF)
	PV01	75001872	PIN JACK, 10/10P ST
	PV90	23713710	SOCKET, D-SUB 15P, KRD-8622
	Q101	23205506	TRANSISTOR, 2SC4081 Q
	Q400	23205276	TRANSISTOR, 2SA1586Y(TE85L,F)
	Q401	23205276	TRANSISTOR, 2SA1586Y(TE85L,F)
	Q402	23205506	TRANSISTOR, 2SC4081 Q
	Q407	23205276	TRANSISTOR, 2SA1586Y(TE85L,F)
	Q408	23205276	TRANSISTOR, 2SA1586Y(TE85L,F)
	Q409	23205506	TRANSISTOR, 2SC4081 Q
	Q410	23205506	TRANSISTOR, 2SC4081 Q
	Q610	23009368	IC, TA2024(T)
	Q630	23009942	IC, LA4525-E
	Q660	23205506	TRANSISTOR, 2SC4081 Q
	Q661	23205506	TRANSISTOR, 2SC4081 Q
	Q662	23205325	TRANSISTOR, RN2404(F)
	Q663	23205506	TRANSISTOR, 2SC4081 Q
	Q671	23205302	TRANSISTOR, 2SC3326-B(F)
	Q672	23205302	TRANSISTOR, 2SC3326-B(F)
	Q673	23205443	TRANSISTOR, 2SA1162-Y(F)
	Q675	23205302	TRANSISTOR, 2SC3326-B(F)
	Q676	23205302	TRANSISTOR, 2SC3326-B(F)
	Q678	23205506	TRANSISTOR, 2SC4081 Q
	Q679	23205506	TRANSISTOR, 2SC4081 Q
	Q680	23205506	TRANSISTOR, 2SC4081 Q
	Q681	23205506	TRANSISTOR, 2SC4081 Q
	Q682	23205325	TRANSISTOR, RN2404(F)
	Q4100	23085635	TRANSISTOR, 2SC3437-Y(TE85L,F)
	Q4101	23085635	TRANSISTOR, 2SC3437-Y(TE85L,F)
	Q4102	23085635	TRANSISTOR, 2SC3437-Y(TE85L,F)
	Q4103	23085635	TRANSISTOR, 2SC3437-Y(TE85L,F)
	QA01	75001884	IC, T5CB5-6G52(F,JZ)
	QA03	75001878	IC, TC7SH126FU(TE85L,F)
	QA70	23205506	TRANSISTOR, 2SC4081 Q
	QA71	23205506	TRANSISTOR, 2SC4081 Q
	QA72	23205506	TRANSISTOR, 2SC4081 Q
	QA73	23205506	TRANSISTOR, 2SC4081 Q
	QD80	23085555	IC, PQ05RD11J00H
	QD209	23205330	TRANSISTOR, RN1403(F)
	QG01	23009672	IC, MSP3410GQI-C12-100

	QG02	23085415	IC, BD4746G
	QG03	23205329	TRANSISTOR, RN1404(F)
	QG04	23205463	TRANSISTOR, 2SC2712-Y(TE85L,F)
	QG05	23085576	IC, OP AMP, BA4558F
	QG07	23085576	IC, OP AMP, BA4558F
	QS01	23009613	IC, CD4052BNSR
	QS02	23009614	IC, CD4053BNSR
	QS03	23009614	IC, CD4053BNSR
	QS04	23205329	TRANSISTOR, RN1404(F)
	QS05	23205329	TRANSISTOR, RN1404(F)
	QS06	23205329	TRANSISTOR, RN1404(F)
	QS07	23205329	TRANSISTOR, RN1404(F)
	QS08	23205392	TRANSISTOR, 2SC5343UF-Y(BULK)
	QS09	23205392	TRANSISTOR, 2SC5343UF-Y(BULK)
	QS10	23205392	TRANSISTOR, 2SC5343UF-Y(BULK)
	QS11	23205392	TRANSISTOR, 2SC5343UF-Y(BULK)
	QS12	23205325	TRANSISTOR, RN2404(F)
	QS13	23205302	TRANSISTOR, 2SC3326-B(F)
	QS14	23205302	TRANSISTOR, 2SC3326-B(F)
	QS15	23205325	TRANSISTOR, RN2404(F)
	QS16	23205302	TRANSISTOR, 2SC3326-B(F)
	QS17	23205302	TRANSISTOR, 2SC3326-B(F)
	QS18	23205506	TRANSISTOR, 2SC4081 Q
	QS24	23205302	TRANSISTOR, 2SC3326-B(F)
	QS25	23205302	TRANSISTOR, 2SC3326-B(F)
	QS26	23205325	TRANSISTOR, RN2404(F)
	QS27	23085576	IC, OP AMP, BA4558F
	QS30	23205302	TRANSISTOR, 2SC3326-B(F)
	QS31	23205302	TRANSISTOR, 2SC3326-B(F)
	QS32	23205302	TRANSISTOR, 2SC3326-B(F)
	QS33	23205302	TRANSISTOR, 2SC3326-B(F)
	QV16	23085823	IC, MM1508XNRE
	QV17	23085823	IC, MM1508XNRE
	QV18	23085823	IC, MM1508XNRE
	QV21	23205443	TRANSISTOR, 2SA1162-Y(F)
	QV22	23085635	TRANSISTOR, 2SC3437-Y(TE85L,F)
	QV23	23085635	TRANSISTOR, 2SC3437-Y(TE85L,F)
	QV24	23205506	TRANSISTOR, 2SC4081 Q
	QV25	23205329	TRANSISTOR, RN1404(F)
	QV26	23205329	TRANSISTOR, RN1404(F)
	QV27	23205329	TRANSISTOR, RN1404(F)

	QV30	23205507	TRANSISTOR, 2SA1576A Q
	QV31	23205329	TRANSISTOR, RN1404(F)
	QV32	23205507	TRANSISTOR, 2SA1576A Q
	QV33	23205329	TRANSISTOR, RN1404(F)
	QV51	23205506	TRANSISTOR, 2SC4081 Q
	QV52	23205506	TRANSISTOR, 2SC4081 Q
	QV53	23205506	TRANSISTOR, 2SC4081 Q
	QV54	23205506	TRANSISTOR, 2SC4081 Q
	QV55	23205506	TRANSISTOR, 2SC4081 Q
	R103	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	R104	76011822	RESISTOR, CHIP, 1/20W 8.2K OHM J
	R105	76011333	RESISTOR, CHIP, 1/20W 33K OHM J
	R107	76000445	CHIP JUMPER, 1608TYPE
	R108	76000445	CHIP JUMPER, 1608TYPE
	R114	76000445	CHIP JUMPER, 1608TYPE
	R125	76011472	RESISTOR, CHIP, 1/20W 4.7K OHM J
	R167	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	R169	76000445	CHIP JUMPER, 1608TYPE
	R170	76011682	RESISTOR, CHIP, 1/20W 6.8K OHM J
	R459	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	R460	76011222	RESISTOR, CHIP, 1/20W 2.2K OHM J
	R461	76011750	RESISTOR, CHIP, 1/20W 75 OHM J
	R462	76011474	RESISTOR, CHIP, 1/20W 470K OHM J
	R463	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	R464	76011472	RESISTOR, CHIP, 1/20W 4.7K OHM J
	R465	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	R466	76011333	RESISTOR, CHIP, 1/20W 33K OHM J
	R601	76554470	RESISTOR, OXIDE METAL FILM, 2W 47 OHM J
	R605	76000606	RESISTOR, CHIP, 1/16W 8.2K OHM F
	R609	76011273	RESISTOR, CHIP, 1/20W 27K OHM J
	R610	76011124	RESISTOR, CHIP, 1/20W 120K OHM J
	R611	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
	R612	76011273	RESISTOR, CHIP, 1/20W 27K OHM J
	R613	76011124	RESISTOR, CHIP, 1/20W 120K OHM J
	R618	76011223	RESISTOR, CHIP, 1/20W 22K OHM J
	R619	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	R620	76871100	RESISTOR, CHIP, 1/8W 10 OHM J
	R623	76871100	RESISTOR, CHIP, 1/8W 10 OHM J
	R630	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
	R631	76011224	RESISTOR, CHIP, 1/20W 220K OHM J
	R632	76011102	RESISTOR, CHIP, 1/20W 1K OHM J

	R633	76011104	RESISTOR, CHIP, 1/20W 100K OHM J
	R634	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	R635	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
	R636	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	R640	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	R641	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	R642	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
	R645	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	R646	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	R666	76011563	RESISTOR, CHIP, 1/20W 56K OHM J
	R670	76011472	RESISTOR, CHIP, 1/20W 4.7K OHM J
	R671	76011182	RESISTOR, CHIP, 1/20W 1.8K OHM J
	R672	76011472	RESISTOR, CHIP, 1/20W 4.7K OHM J
	R673	76011182	RESISTOR, CHIP, 1/20W 1.8K OHM J
	R674	76011563	RESISTOR, CHIP, 1/20W 56K OHM J
	R676	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	R677	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	R678	76011222	RESISTOR, CHIP, 1/20W 2.2K OHM J
	R679	76011222	RESISTOR, CHIP, 1/20W 2.2K OHM J
	R682	76011104	RESISTOR, CHIP, 1/20W 100K OHM J
	R683	76011223	RESISTOR, CHIP, 1/20W 22K OHM J
	R684	76011104	RESISTOR, CHIP, 1/20W 100K OHM J
	R685	76011222	RESISTOR, CHIP, 1/20W 2.2K OHM J
	R686	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
	R687	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	R688	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	R689	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
	R690	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	R691	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	R692	76011223	RESISTOR, CHIP, 1/20W 22K OHM J
	R4073	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	R4074	76011222	RESISTOR, CHIP, 1/20W 2.2K OHM J
	R4075	76011750	RESISTOR, CHIP, 1/20W 75 OHM J
	R4076	76011474	RESISTOR, CHIP, 1/20W 470K OHM J
	R4077	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	R4078	76011472	RESISTOR, CHIP, 1/20W 4.7K OHM J
	R4079	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	R4080	76011333	RESISTOR, CHIP, 1/20W 33K OHM J
	R4082	76011223	RESISTOR, CHIP, 1/20W 22K OHM J
	R4083	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	R4084	76011473	RESISTOR, CHIP, 1/20W 47K OHM J

	R4085	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	R4100	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
	R4101	76011681	RESISTOR, CHIP, 1/20W 680 OHM J
	R4102	76011471	RESISTOR, CHIP, 1/20W 470 OHM J
	R4103	76011681	RESISTOR, CHIP, 1/20W 680 OHM J
	R4104	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
	R4105	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
	R4106	76011681	RESISTOR, CHIP, 1/20W 680 OHM J
	R4107	76011471	RESISTOR, CHIP, 1/20W 470 OHM J
	R4108	76011681	RESISTOR, CHIP, 1/20W 680 OHM J
	R4109	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
	R6601	76011223	RESISTOR, CHIP, 1/20W 22K OHM J
	R6602	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	R6603	76011104	RESISTOR, CHIP, 1/20W 100K OHM J
	RA01	76011331	RESISTOR, CHIP, 1/20W 330 OHM J
	RA02	76011105	RESISTOR, CHIP, 1/20W 1M OHM J
	RA09	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
	RA10	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
	RA11	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RA12	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RA13	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RA14	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RA15	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
	RA17	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RA20	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
	RA21	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
	RA22	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
	RA23	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
	RA24	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
	RA26	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
	RA28	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RA29	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RA30	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RA31	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RA32	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	RA33	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RA34	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RA35	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RA36	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RA39	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RA44	76011101	RESISTOR, CHIP, 1/20W 100 OHM J

	RA45	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RA49	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
	RA50	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	RA52	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RA53	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RA55	76011471	RESISTOR, CHIP, 1/20W 470 OHM J
	RA56	76011331	RESISTOR, CHIP, 1/20W 330 OHM J
	RA57	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RA58	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RA59	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RA60	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RA61	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RA62	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RA63	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RA64	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RA66	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RA70	76011471	RESISTOR, CHIP, 1/20W 470 OHM J
	RA81	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
	RA82	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RA83	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
	RA100	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	RA101	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	RA102	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	RA103	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RA104	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RA105	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RA106	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RA108	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	RA112	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	RA113	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	RA114	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RA116	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	RA117	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	RA118	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	RA120	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
	RA126	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RB33	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	RB57	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	RB58	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	RB59	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	RB60	76011103	RESISTOR, CHIP, 1/20W 10K OHM J

	RB61	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	RB62	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	RC01	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
	RC02	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
	RC03	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
	RC04	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
	RC24	76011330	RESISTOR, CHIP, 1/20W 33 OHM J
	RD254	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RD255	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RG01	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RG02	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RG03	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RG04	76011472	RESISTOR, CHIP, 1/20W 4.7K OHM J
	RG06	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RG07	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RG09	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RG010	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RG11	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RG12	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RG13	76011472	RESISTOR, CHIP, 1/20W 4.7K OHM J
	RG14	76011472	RESISTOR, CHIP, 1/20W 4.7K OHM J
	RG15	76011183	RESISTOR, CHIP, 1/20W 18K OHM J
	RG16	76011183	RESISTOR, CHIP, 1/20W 18K OHM J
	RG17	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RG18	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RG19	76011332	RESISTOR, CHIP, 1/20W 3.3K OHM J
	RG23	76011332	RESISTOR, CHIP, 1/20W 3.3K OHM J
	RG24	76011683	RESISTOR, CHIP, 1/20W 68K OHM J
	RG25	76011222	RESISTOR, CHIP, 1/20W 2.2K OHM J
	RG26	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RG27	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RG28	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RG29	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RG30	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RG31	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RG32	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RG33	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RG34	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
	RG35	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RG37	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RG38	76011101	RESISTOR, CHIP, 1/20W 100 OHM J

	RG40	76011183	RESISTOR, CHIP, 1/20W 18K OHM J
	RG41	76011183	RESISTOR, CHIP, 1/20W 18K OHM J
	RG42	76011472	RESISTOR, CHIP, 1/20W 4.7K OHM J
	RG43	76011472	RESISTOR, CHIP, 1/20W 4.7K OHM J
	RG44	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RG45	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RG46	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RG47	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RR01	76871750	RESISTOR, CHIP, 1/8W 75 OHM J
	RR02	76871750	RESISTOR, CHIP, 1/8W 75 OHM J
	RR03	76871750	RESISTOR, CHIP, 1/8W 75 OHM J
	RR04	76011330	RESISTOR, CHIP, 1/20W 33 OHM J
	RR05	76011330	RESISTOR, CHIP, 1/20W 33 OHM J
	RR06	76011330	RESISTOR, CHIP, 1/20W 33 OHM J
	RR50	76872750	RESISTOR, CHIP, 1/16W 75 OHM J
	RS01	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RS02	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RS03	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RS04	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RS05	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RS06	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RS07	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	RS08	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	RS09	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RS10	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RS11	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RS12	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RS13	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RS14	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RS15	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RS16	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RS17	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RS18	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RS19	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RS20	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RS21	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	RS22	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	RS23	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RS24	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RS25	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RS26	76011101	RESISTOR, CHIP, 1/20W 100 OHM J

	RS27	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RS28	76011393	RESISTOR, CHIP, 1/20W 39K OHM J
	RS29	76011563	RESISTOR, CHIP, 1/20W 56K OHM J
	RS30	76011222	RESISTOR, CHIP, 1/20W 2.2K OHM J
	RS31	76011393	RESISTOR, CHIP, 1/20W 39K OHM J
	RS32	76011563	RESISTOR, CHIP, 1/20W 56K OHM J
	RS33	76011222	RESISTOR, CHIP, 1/20W 2.2K OHM J
	RS34	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RS35	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RS36	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RS37	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RS38	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RS39	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RS40	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	RS41	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	RS42	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RS43	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RS44	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RS45	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RS46	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RS47	76011393	RESISTOR, CHIP, 1/20W 39K OHM J
	RS48	76011563	RESISTOR, CHIP, 1/20W 56K OHM J
	RS49	76011222	RESISTOR, CHIP, 1/20W 2.2K OHM J
	RS50	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RS51	76011393	RESISTOR, CHIP, 1/20W 39K OHM J
	RS52	76011563	RESISTOR, CHIP, 1/20W 56K OHM J
	RS53	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RS54	76011222	RESISTOR, CHIP, 1/20W 2.2K OHM J
	RS56	76011681	RESISTOR, CHIP, 1/20W 680 OHM J
	RS57	76011681	RESISTOR, CHIP, 1/20W 680 OHM J
	RS58	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	RS60	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RS61	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RS62	76011104	RESISTOR, CHIP, 1/20W 100K OHM J
	RS63	76011104	RESISTOR, CHIP, 1/20W 100K OHM J
	RS64	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
	RS65	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
	RS66	76011104	RESISTOR, CHIP, 1/20W 100K OHM J
	RS67	76011104	RESISTOR, CHIP, 1/20W 100K OHM J
	RS68	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RS69	76011473	RESISTOR, CHIP, 1/20W 47K OHM J

	RS71	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	RS72	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	RS73	76011681	RESISTOR, CHIP, 1/20W 680 OHM J
	RS74	76011681	RESISTOR, CHIP, 1/20W 680 OHM J
	RS75	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RS76	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RS77	76011681	RESISTOR, CHIP, 1/20W 680 OHM J
	RS78	76011681	RESISTOR, CHIP, 1/20W 680 OHM J
	RS79	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RS80	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RS81	76011104	RESISTOR, CHIP, 1/20W 100K OHM J
	RS82	76011104	RESISTOR, CHIP, 1/20W 100K OHM J
	RS83	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RS84	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RS85	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
	RS86	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
	RS88	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	RS89	76011822	RESISTOR, CHIP, 1/20W 8.2K OHM J
	RS90	76011822	RESISTOR, CHIP, 1/20W 8.2K OHM J
	RS91	76011123	RESISTOR, CHIP, 1/20W 12K OHM J
	RS92	76011123	RESISTOR, CHIP, 1/20W 12K OHM J
	RS93	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RS94	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RS95	76011222	RESISTOR, CHIP, 1/20W 2.2K OHM J
	RS96	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RS97	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RV01	76872750	RESISTOR, CHIP, 1/16W 75 OHM J
	RV02	76872750	RESISTOR, CHIP, 1/16W 75 OHM J
	RV03	76872151	RESISTOR, CHIP, 1/16W 150 OHM J
	RV04	76872151	RESISTOR, CHIP, 1/16W 150 OHM J
	RV05	76872750	RESISTOR, CHIP, 1/16W 75 OHM J
	RV06	76872750	RESISTOR, CHIP, 1/16W 75 OHM J
	RV11	76872750	RESISTOR, CHIP, 1/16W 75 OHM J
	RV13	76872750	RESISTOR, CHIP, 1/16W 75 OHM J
	RV25	76011750	RESISTOR, CHIP, 1/20W 75 OHM J
	RV26	76011750	RESISTOR, CHIP, 1/20W 75 OHM J
	RV27	76011750	RESISTOR, CHIP, 1/20W 75 OHM J
	RV51	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RV52	76011391	RESISTOR, CHIP, 1/20W 390 OHM J
	RV54	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RV55	76011473	RESISTOR, CHIP, 1/20W 47K OHM J

	RV56	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RV57	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RV58	76011391	RESISTOR, CHIP, 1/20W 390 OHM J
	RV59	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RV60	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RV61	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RV63	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RV64	76011391	RESISTOR, CHIP, 1/20W 390 OHM J
	RV65	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RV66	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RV67	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RV69	76011391	RESISTOR, CHIP, 1/20W 390 OHM J
	RV76	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RV78	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RV79	76011391	RESISTOR, CHIP, 1/20W 390 OHM J
	RV80	76011473	RESISTOR, CHIP, 1/20W 47K OHM J
	RV92	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	RV93	76011682	RESISTOR, CHIP, 1/20W 6.8K OHM J
	RV94	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	RV95	76011682	RESISTOR, CHIP, 1/20W 6.8K OHM J
	RV96	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
	RV97	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
	RV215	76011750	RESISTOR, CHIP, 1/20W 75 OHM J
	RV216	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	RV225	76011750	RESISTOR, CHIP, 1/20W 75 OHM J
	RV226	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	RV227	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RV228	76011472	RESISTOR, CHIP, 1/20W 4.7K OHM J
	RV235	76011750	RESISTOR, CHIP, 1/20W 75 OHM J
	RV236	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
	RV237	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RV238	76011472	RESISTOR, CHIP, 1/20W 4.7K OHM J
	RV251	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RV252	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
	RV253	76011392	RESISTOR, CHIP, 1/20W 3.9K OHM J
	RV254	76011432	RESISTOR, CHIP, 1/20W 4.3K OHM J
	RV255	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
	RV256	76011152	RESISTOR, CHIP, 1/20W 1.5K OHM J
	RV257	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
	RV258	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RV259	76011222	RESISTOR, CHIP, 1/20W 2.2K OHM J

	RV260	76011101	RESISTOR, CHIP, 1/20W 100 OHM J
	RX51	76000445	CHIP JUMPER, 1608TYPE
	RX52	76000445	CHIP JUMPER, 1608TYPE
	RX53	76000445	CHIP JUMPER, 1608TYPE
	XA01	23153586	CERAMIC RESONATOR, 8.0MHZ 40OHM, TCR1085AM
	XG01	75001870	RESONATOR, 18.432MHZ

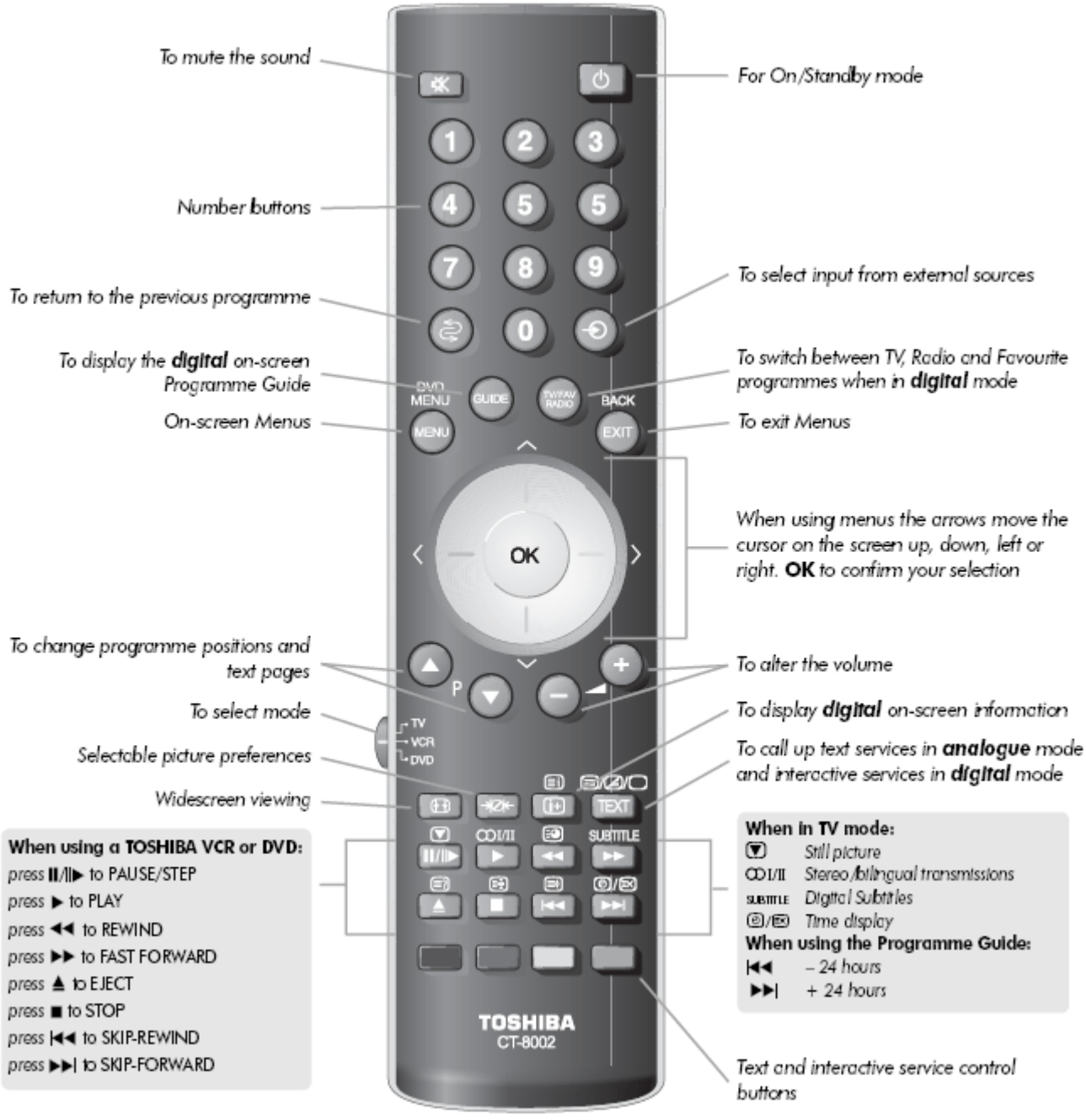
U02B FRONT AV (PE0029)

	Location	Parts No.	Description
*	U02B	75002061	PC BOARD ASSY, PE0029A2, FRONT_AV
	C604	76109103	CAPACITOR, CERAMIC CHIP, 50V B 0.01UF K
	C605	76109103	CAPACITOR, CERAMIC CHIP, 50V B 0.01UF K
	CC11	76109102	CAPACITOR, CERAMIC CHIP, 50V B 1000PF K
	CC12	76109102	CAPACITOR, CERAMIC CHIP, 50V B 1000PF K
	CV122	76105101	CAPACITOR, CERAMIC CHIP, 50V CH 100PF J
	CY650	76109103	CAPACITOR, CERAMIC CHIP, 50V B 0.01UF K
	DV120	23357745	DIODE, ZENER, MA8056-M
	P661	23365444	EARPHONE JACK, D3.5
	PV60	23365275	PHONO JACK, 3P V-L-R, YKC21
	R696	76871221	RESISTOR, CHIP, 1/8W 220 OHM J
	R697	76871221	RESISTOR, CHIP, 1/8W 220 OHM J
	R698	76871221	RESISTOR, CHIP, 1/8W 220 OHM J
	R699	76871221	RESISTOR, CHIP, 1/8W 220 OHM J
	RC11	76011821	RESISTOR, CHIP, 1/20W 820 OHM J
	RC12	76011821	RESISTOR, CHIP, 1/20W 820 OHM J
	RV10	76000445	CHIP JUMPER, 1608TYPE
	RV123	76872750	RESISTOR, CHIP, 1/16W 75 OHM J
	RV129	76011101	RESISTOR, CHIP, 1/20W 100 OHM J

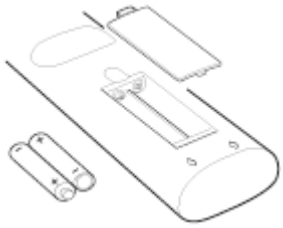
FUNCTION AND OPERATION

The Remote Control

Simple at-a-glance reference of your remote control.


To mute the sound
For On/Standby mode
Number buttons
To return to the previous programme
To select input from external sources
To display the digital on-screen Programme Guide
To switch between TV, Radio and Favourite programmes when in digital mode
On-screen Menus
To exit Menus
When using menus the arrows move the cursor on the screen up, down, left or right. OK to confirm your selection
To change programme positions and text pages
To alter the volume
To select mode
To display digital on-screen information
Selectable picture preferences
To call up text services in analogue mode and interactive services in digital mode
Widescreen viewing
When using a TOSHIBA VCR or DVD:
press II/II▶ to PAUSE/STEP
press ▶ to PLAY
press ◀◀ to REWIND
press ▶▶ to FAST FORWARD
press ▲ to EJECT
press ■ to STOP
press |◀◀ to SKIP-REWIND
press ▶▶| to SKIP-FORWARD
When in TV mode:
Still picture
CD I/II Stereo/bilingual transmissions
SUBTITLE Digital Subtitles
Time display
When using the Programme Guide:
|◀◀ – 24 hours
▶▶| + 24 hours
Text and interactive service control buttons
TOSHIBA
CT-8002

Inserting Battery and Effective Range of the Remote

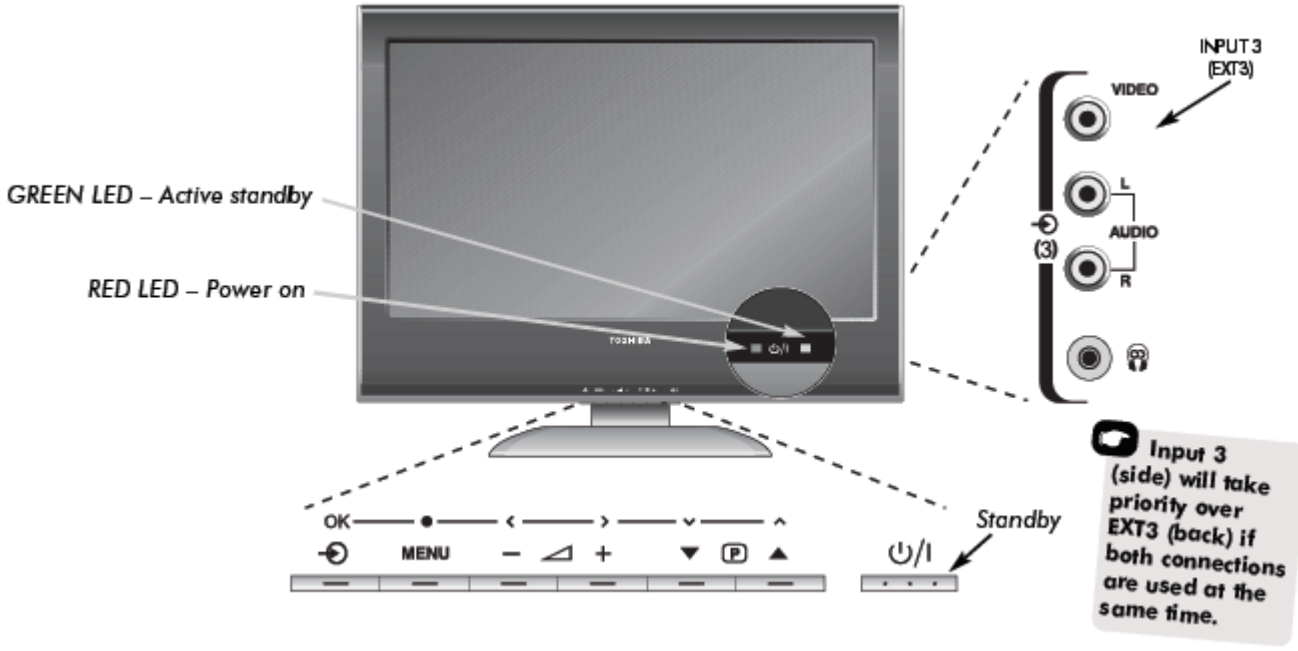


Remove the back cover to reveal the battery compartment and make sure the batteries are inserted the right way round. Suitable battery types for this remote are AAA, IEC R03 1.5V.
Do not combine a used, old battery with a new one or mix battery types. Remove dead batteries immediately to prevent acid from leaking into the battery compartment. Dispose of them in a designated disposal area.
The performance of the remote control will deteriorate beyond a distance of five metres or outside an angle of 30 degrees from the centre of the television. If the operating range becomes reduced the batteries may need replacing.

FUNCTION AND OPERATION

Control and Input Connection

A wide variety of external equipment can be connected to the input sockets on the side of the television.
Whilst all the necessary adjustments and controls for the television are made using the remote control, the buttons on the television may be used for some functions.



Switching On

If the RED LED is unlit check that the mains plug is connected to the power supply. If the picture does not appear press ⏻ on the remote control, it may take a few moments.

To put the television into Standby press ⏻ on the remote control, the GREEN active standby LED will appear next to the RED for a few moments then disappear. To view the television press ⏻ again. The picture may take a few seconds to appear.

Using the Remote Control

Press the **MENU** button on the remote control to see the menus.

In **digital** mode the menu bar at the top of the screens will show three different topics shown in symbols. As each symbol is selected by pressing the ❮ or ❯ button on the remote control, its respective options will appear below.

In **analogue** mode the menu appears as a list of five topics. As each symbol is selected by pressing the ❮ or ❯ button on the remote control, its respective options will appear below.

To use the options press the ^ and ⌄ button on the remote control to move up and down through them and **OK**, ❮ or ❯ to select the required choice. Follow the on screen instructions. The functions of each menu are described in detail throughout the manual.

Using the Control and Connection

To alter the volume press — ◿ +.

To alter the programme position press ▼ Ⓟ ▲.

Press **MENU** and ❮, ❯, ⌄ or ^ to control the sound and picture options.

Press **MENU** twice to finish.

When connecting sound equipment to **EXT3**, connect the audio output of the equipment to the phono sockets on the television.

To select the Input, press ⊕ until the display shows **EXT3** as described. The television will automatically sense the type of signal.

Please always refer to the owner's manual of the equipment to be connected for full details.

Please note: Inserting the headphone plug will mute the sound from all speakers.

FUNCTION AND OPERATION

Tuning the Television for the First Time

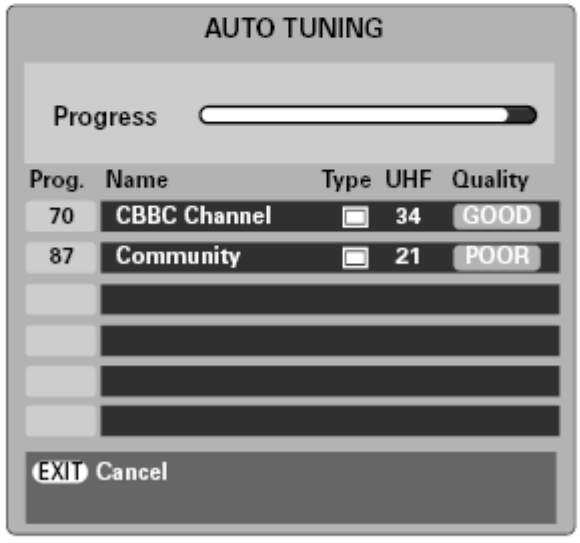
Before switching on the television put your decoder and media recorder to **Standby** if they are connected and ensure the aerial is connected. To set up the television use the buttons on the remote control.

1 Press the power-on button, the **Welcome** screen will appear. This screen will appear the first time that the television is switched on and each time the television is reset.

TOSHIBA
Thank you for choosing this Toshiba television.
First you need to tune your television.
Please ensure the aerial is connected
before proceeding.
Press ● to continue
Welcome

2 Press **OK** to start tuning.

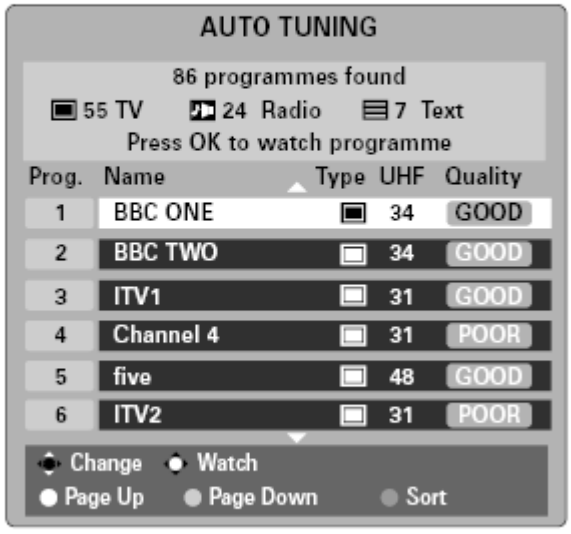
3 The **AUTO TUNING** screen will appear and the television will start to search for available stations. The progress bar will move along the line.



You must allow the television to complete the search.

When the search is complete the television will automatically select programme one.

The **AUTO TUNING** screen will display the total number of services found.



4 Use ⌄ or ⌃ to move through the list to select a programme then press **OK** to view.

FUNCTION AND OPERATION

Digital Auto Tuning

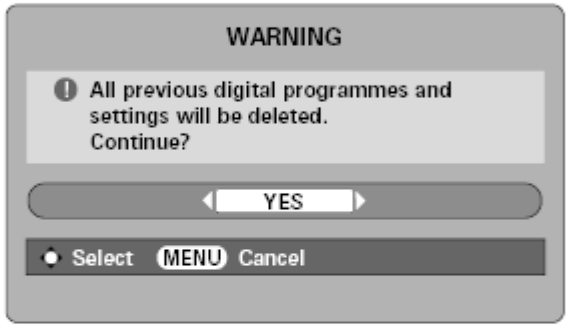
Note: As new services are broadcast it will be necessary to re-tune the television in order to view them.

Auto Tuning

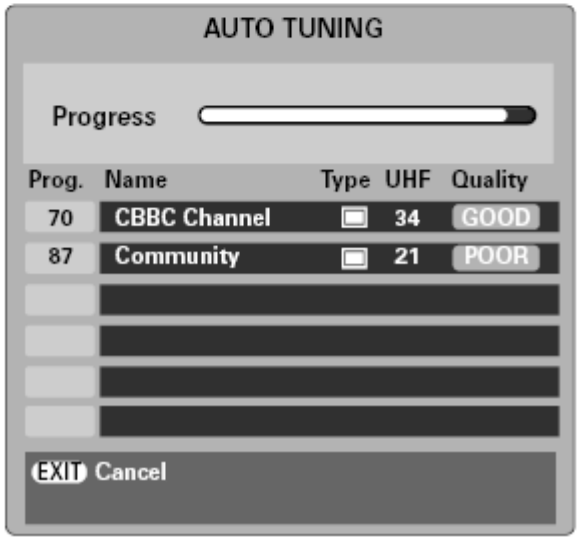
Auto tuning *will completely re-tune the television and can be used to up date the channel list.* ***It is recommended that Auto tuning is run periodically to ensure that all new services are added.*** *All current programmes and settings, i.e. favourites and locked programmes, will be lost.*

1. Press **MENU**, the **SETUP MENU** will appear. Use ❯ to highlight **Auto tuning**. Press **OK**.

2. A screen will appear warning that previous digital programmes and settings will be deleted. Press **OK** to continue with the **Auto tuning**.



The television will start to search for all available stations.

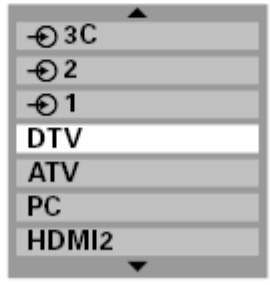


You must allow the television to complete the search.

When the search is complete the **Auto tuning** screen will display the total number of services found.

3 Use ⌄ or ⌃ to move through the list to select a programme then press **OK** to view.

At any time by pressing and holding ⊕ a list will appear on screen showing modes and all stored external equipment. Use ⌃ and ⌄ to highlight and **OK** to select.



When **DTV** mode is selected pressing ⊕ repeatedly will scroll through all connected equipment and the last channel being viewed in DTV mode.

FUNCTION AND OPERATION

Digital Programme Sorting, Manual Tuning

Note: When the television is switched off the mode being viewed at the time will automatically be selected when the television is switched back on.

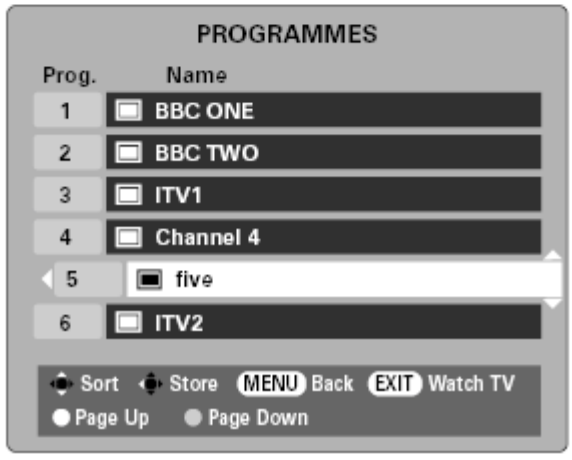
Programme Sorting

1 The station order may be changed to suit personal preference. Press **MENU**, the **SETUP MENU** will appear on screen.

2 Use ⌄ to move down through the list and highlight **Programmes**. Press **OK**.

3 With the list of stations now showing use ⌄ or ⌃ to highlight the station you want to *move* and press ❯.

The selected station will be moved to the right of the screen.



4 Use ⌄ or ⌃ to move through the list to your *preferred* position. As you do so the other stations will move to make room.

5 Press ❮ to store your move. Repeat as necessary, then press **EXIT**.

Manual Tuning

This feature is available for service engineers or can be used for direct channel entry if the multiplex channel is known.

1. Select **Manual tuning** from the **SETUP MENU** and press **OK**.

2. Enter the multiplex number using the number buttons and then press **OK**. The television will automatically search for that multiplex.

   When the multiplex is found any channels not currently on the programme list will be added and the programme information at the top of the screen will be updated.

3. Repeat as necessary. Press **EXIT** to finish.

FUNCTION AND OPERATION

Tuning Analogue Mode for the First Time

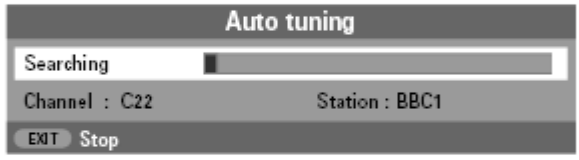
The **Quick Setup** feature will tune all **analogue** channels currently available in the area. To put the television into **ATV** mode press and hold then use or to highlight **ATV**. Press **OK** to select.

1 Select **ATV** mode. The **Quick Setup** screen will appear.

2 Using ❮ or ❯ select your **language**, then press **OK**.

3 Then press ❮ or ❯ to select your **country**.

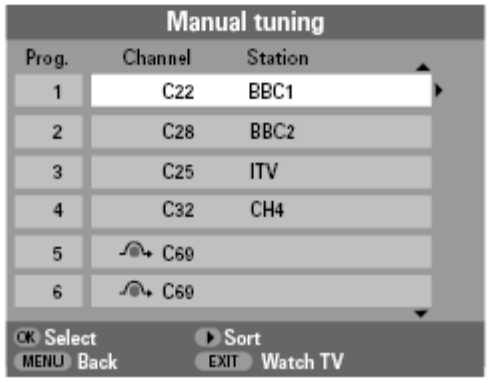
4 To start **Auto tuning** press **OK**.



5 The search will begin for all available stations. The slide bar will move along the line as the search progresses.

You must allow the television to complete the search.

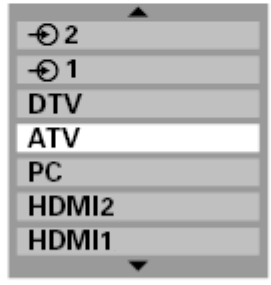
When the search is complete the television will automatically select programme position 1 and the **Manual tuning** screen will appear.



7 Use ⌄ or ⌃ to move through the list to select a programme then press **OK** to view.

The station order may be changed using the **Manual tuning** screen (*see the* **analogue** *'Sorting programme positions' section*).

At any time by pressing and holding ⊕ a list will appear on screen showing modes and all stored external equipment. Use ⌃ and ⌄ to highlight and **OK** to select.



When **ATV** mode is selected pressing ⊕ repeatedly will scroll through all connected equipment and the last channel being viewed in ATV mode.

FUNCTION AND OPERATION

Analogue Manual Tune

The television can be tuned-in manually using **Manual tuning.** For example: if the television cannot be connected to a media recorder/decoder with a SCART lead or to tune-in a station on another **System.**

Use ❮ and ❯ to move across the screen and select any of these Manual Tune options.

Programme : **The number to be pressed on the remote control.**

System : **Specific to certain areas.**

Colour system : **Factory set to Auto, should only be changed if problems are experienced, i.e. NTSC input from external source.**

Programme skip : **means nothing has been stored or the facility to skip the channel is ON.**

Channel : **The channel number on which a station is being broadcast.**

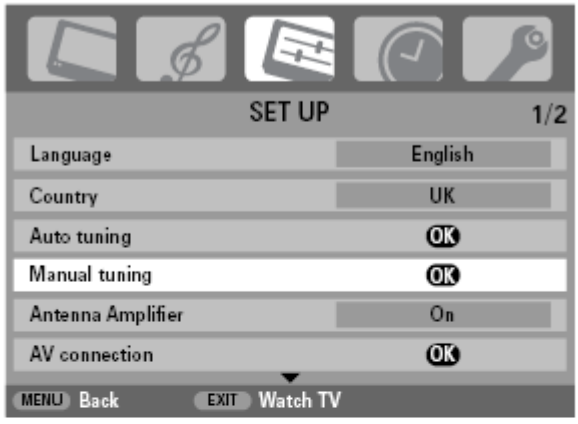
Search : **Search up and down for a signal.**

Manual fine tuning : **Only used if interference/weak signal is experienced.**

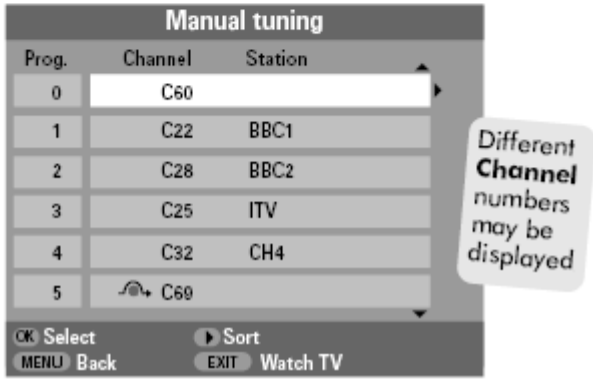
Station : **Station identification. Use the ^ or v and ❮or ❯ buttons to enter up to seven characters.**

To allocate a programme position on the television for a decoder and media recorder: turn the decoder on, insert a pre-recorded film in the media recorder and press PLAY, then manually tune.

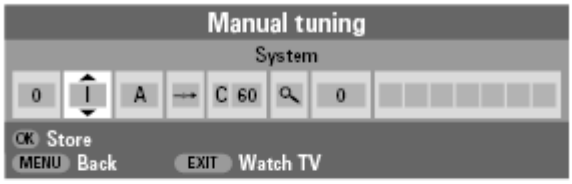
1 Press **MENU** and using ❮ or ❯ select the **SET UP** menu, with ❯ highlight **Manual tuning**, press **OK** to select.



2 Use ❮ or ❯ to highlight the programme position required e.g. we suggest ***Prog. 0*** for a media recorder.



3 Press **OK** to select. If the programme is skipped, **Programme skip** must be removed before storing.



4 Press ❯ to select **System** and use ^ or v to change if required.

5 Then press ❯ to select **Search**.

6 Press ^ or v to begin the search. The search symbol will flash.

7 Each signal will show on the television, if it is not your media recorder, press ^ or v again to restart the search.

8 When your media recorder signal is found, press ❯ to move along to **Station**. With ^, v, ❮ and ❯ put in the required characters, *e.g.* **VCR**.

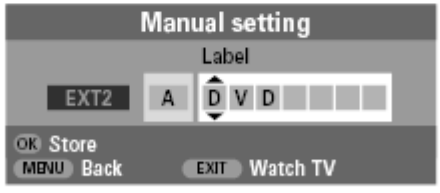
9 Press **OK** to store.

10 Repeat for each ***programme position*** you want to tune or, press **MENU** to return to the list of channels and select the next number to tune.

11 Press **EXIT** when you have finished.

12 To name external equipment, *e.g.* DVD on EXT2, press ⊕ to select **EXT2**, then select **Manual setting** from the **SET UP** menu.

13 Press ❯ to select **Label** then using ^, v, ❮ and ❯ put in the required characters. Press **OK**.



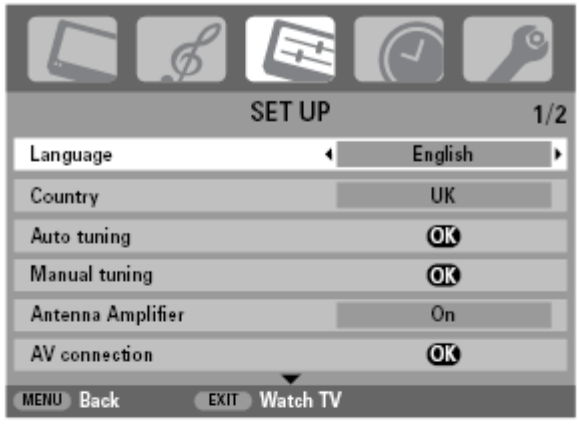
PLEASE NOTE This television has direct channel entry if the channel numbers are known. Select the **Manual tuning** screen in ***Step 3***. Enter the **Programme number**, the **System**, then **C** for standard (terrestrial) channels or **S** for cable channels and the **Channel** number. Press **OK** to store.

FUNCTION AND OPERATION

Auto Tune

Using Auto Tuning

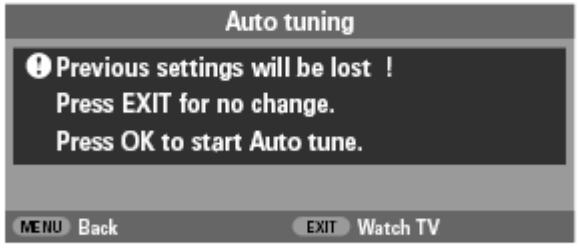
1. To set up the television using **Auto tuning**, press **MENU** and use ❮ or ❯ to select the **SET UP** menu.



2. Press ❯ to highlight **Language** and ❮ or ❯ to select.

3. Using ❯ highlight **Country**, then ❮ or ❯ to select. The television will now tune the stations for your country.

4. Press ❯ to highlight **Auto tuning**, then press **OK**.



5. To start **Auto tuning** press **OK**.

You must allow the television to complete the search.

When the search is complete the television will automatically select programme position 1. This may not be a clear picture, so the station order can be changed (see 'Sorting programme positions' *section*).

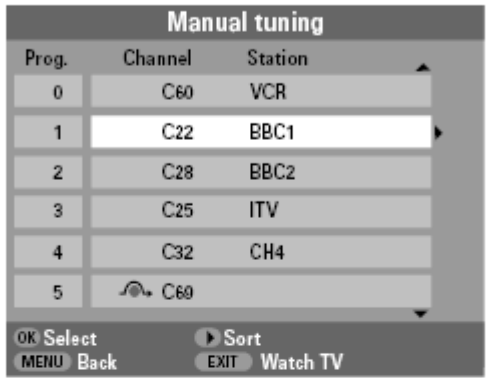
FUNCTION AND OPERATION

Analogue Programme Skip, Sorting Programme Position

Programme Skip

To prevent certain programmes from being viewed, the programme position can be skipped. The remote control must be removed as the channels will still be available using the number buttons. Programmes can then be watched as normal using the controls on the television, but the television will not show the skipped programme position.

1 Select **Manual tuning** from the **SET UP** menu.



2 Use ^ or v to highlight the programme position to be skipped and press **OK** to select.

3 Press **>** to select **Programme skip**.

4 Use ^ or v to turn **Programme skip** on. Press **OK**.

on the screen indicates a skipped programme position.

5 Press **MENU** and repeat from ***Step 2*** or press **EXIT**.

Each programme position has to be *individually* selected. To turn **Programme skip** off, repeat the procedure for each position.

Skipped programme positions ***cannot*** be selected by **P▲** and **P▼** or by the controls on the television, but ***can*** still be accessed by the number buttons on the remote control.

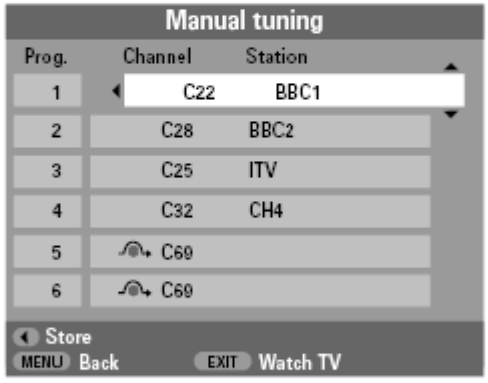
Sorting Programme Position

Channels may be moved and stored on the programme position of your choice.

1. Select **Manual tuning** from the **SET UP** menu.

2. With the list of stations now showing use ❯ or ❮ to highlight the station you want to move and press ❯.

   The selected station will be moved to the right of the screen.



3. Use ❯ or ❮ to move through the list to your *preferred* position. As you do so the other stations will move to make room.

4. Press ❮ to store your move.

   Repeat as necessary, then press **EXIT**.

SPECIFICATION

Broadcast systems/channels

PAL-I	UHF	UK21-UK69
PAL-B/G	UHF	E21-E69
	VHF	E2-E12, S1-S41
SECAM-L	UHF	F21-F69
	VHF	F1-F10, B-Q
SECAM-D/K	UHF	R21-R69
	VHF	R1-R12

Video Input PAL, SECAM, NTSC 3.58/4.43

External connections

EXT1	Input/Output	21-pin SCART	RGB, A/V Selectable output
EXT2	Input/Output	21-pin SCART	A/V, S-video Selectable output
EXT3	Input	Phono jacks Phono jacks	Y, P_B/C_B, P_R/C_R A/V
EXT3	Input (Side)	Phono jack Phono jacks	Video Audio L + R
HDMI 1/2	Input	HDMI connector	
PC	Input	Mini D-sub 15-pin	Analog RGB signal
PC/HDMI1 Audio		Phono jacks	Audio L + R
Audio Ouput	Fixed/Variable	Phono jacks	Audio L + R

Stereo		Nicam 2 carrier system	
Visible Screen Size (approx.)	Model	26 32 37	66cm 80cm 94cm
Display		16:9	
Sound output (at 10% distortion)		Main	10W + 10W
Power consumption as specified in EN60107-1 : 1997	Model	26 32 37	135W 159W 188W
Standby (approx.)	Model	26 32 37	<1W <1W <1W

Dimensions (approx.)	Model	26	56cm (H)	66cm (W) 28cm (D)
		32	61cm (H)	80cm (W) 30cm (D)
		37	69cm (H)	92cm (W) 30cm (D)

(Height dimension includes foot stand)

Weight (approx.)	Model	26 32 37	15kg 20kg 25kg
Headphone socket		3.5mm stereo	
Accessories		Remote control 2 batteries (AAA, IEC R03 1.5V)	